



METIK

Maaelu Teadmiskeskus
Centre of Estonian Rural
Research and Knowledge

RIIKLIKE SORDIVÕRDLUSKATSETE TULEMUSED JA KVALITEET 2022



Euroopa Maaelu Arengu
Põllumajandusfond:
Euroopa Investeeringud
maapiirkondadesse

Viljandi 2023



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Katsete läbiviijad

METK Viljandi katsekeskus

Ülle Soorm agronoom-majanduskatsete koordinaator, kaunviljad, heintaimed
Aile Rummel agronoom, tali- ja suviteraviljad
Eve Siro agronoom, õlikultuurid

METK Kuusiku katsekeskus

Maila Eranurm agronoom, rukis, talitritikale, suvioder
Rita Nuiamäe agronoom, talioder, talinisu, suvinisu
Sandra Saanküll agronoom, kaer
Merilin Hindpere agronoom, suviraps

METK Võru katsekeskus

Rein Peedel juhataja, talitritikale, talioder, suvioder, uba
Jüri Kukk agronoom, rukis, tali- ja suvinisu, kaer, hernes
Kersti Pariis / Vanessa Varend agronoom, õlikultuurid

METK söötade ja teravilja laboratoorium

Ann Akk peaspetsialist, kvaliteedinäitajad

METK Jõgeva katsekeskus

Merlin Haljak teadur, talinisu ja suviteraviljad

METK VILJANDI KATSEKESKUS

Männi tee 5, Matapera
71065 Viljandimaa
EESTI
tel: (+372) 433 4406
e-post: viljandi@metk.agri.ee

METK VÕRU KATSEKESKUS

Pärna tee 14, Väimela
65566 Võrumaa
EESTI
tel: (+372) 787 4339
e-post: vorukj@metk.agri.ee

METK KUUSIKU KATSEKESKUS

Kuuseheki tn 6, Kuusiku alevik
79516 Raplamaa
EESTI
tel: (+372) 486 9288
e-post: rut.kaeval@metk.agri.ee

ISSN 2674-2020 (trükis)
ISSN 2674-2039 (võrguväljaanne)
ISBN 978-9916-9505-5-5

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EESSÕNA

Kogumikku „Sordivõrdluskatsete tulemused ja kvaliteet” antakse välja Maaelu Teadmuskeskuse (METK) Viljandi katsekeskuse poolt Eesti põllumeestele 24. korda. Kogumik sisaldab 2022. aastal läbiviidud riiklike majanduskatsete (sordivõrdluskatsete) tulemusi ning annab ülevaate tunnustatud seemnepõldude tulemustest.

Sordivõrdluskatsete tulemused on digitaalselt kättesaadavad METK Viljandi katsekeskuse kodulehel: <https://metk.agri.ee/laboriteenused-poldkatsed/poldkatsed/sordivordluskatsete-tulemused>

Riiklikke majanduskatseid viidi 2022. aastal läbi neljas katsekohas (tabel 1). Kokku oli katses 205 sorti.

Tabel 1. Sortide arv katsekohtades 2021./2022. a (sisaldab jätkukatsetuse sorte)

| KULTUUR | VILJANDI KK | VÕRU KK | KUUSIKU KK | JÕGEVA |
|--------------------------|-------------|------------|------------|-----------|
| Sügiskülv 2021. a | | | | |
| Talinisu (4)* | 22 | 22 | 22 | 21 |
| Talirukis | 28 | 28 | 28 | - |
| Talitritikale | 6 | 6 | 6 | - |
| Talioder (1)* | 4 | 4 | 4 | - |
| Taliraps (2)* | 27 | 27 | - | - |
| Talirüps | 3 | 3 | - | - |
| Kokku | 90 | 90 | 60 | 21 |
| Kevadkülv 2022. a | | | | |
| Suvinisu (5)* | 25 | 25 | 25 | 25 |
| Suvioder (4)* | 24 | 24 | 24 | 24 |
| Kaer (2)* | 8 | 8 | 8 | 8 |
| Suvitritikale | - | - | - | - |
| Suviraps | - | 24 | 24 | - |
| Suvirüps | - | - | - | - |
| Põlduba (7)* | 21 | 21 | - | - |
| Põldhernes (3)* | 8 | 8 | - | - |
| Kanep | - | - | - | - |
| Mais | - | - | - | - |
| Hernes haljasmassiks | - | - | - | - |
| Heintaimed | 5 | - | - | - |
| Kokku | 91 | 110 | 81 | 57 |
| KOKKU | 181 | 200 | 141 | 78 |

* sulgudes jätkukatsetuse sortide arv
- sorte katses ei olnud

Riiklikes majanduskatsetes olevaid sorte tutvustati METK Viljandi katsekeskuses 05.07.2022. a toimunud põllupäeval. Põldkatsete esitluspäevad toimusid ka 28.06.2022 METK Kuusiku katsekeskuses ja 30.06.2022 METK Võru katsekeskuses. Kõik põllupäevad said teoks tänu teadmussirde pikaajalisele programmile põllumajanduse, toidu ja maamajanduse tegevusvaldkonnas (ÜhendPiP). Programmi eesmärgiks on

vastavalt Eesti põllumajanduse ja toidutootmise arenguvajadusele ning erinevate arengukavade eesmärkidele korraldada teadmussiirde tegevusi, tehes seda erinevaid osapooli kaasates nii otsustusprotsessis, kui tegevuste elluviimisel (<https://www.pikk.ee/valdkonnad/teadmussiirde-pikaajalised-programmid/uhendpip/>).

Alates 2007. aastast omab Maaelu Teadmuskeskus iga-aastaselt kontrollitava ja ülevaadatava kvaliteedijuhtimissüsteemi sertifikaati, mis tõendab, et Maaelu Teadmuskeskuse kvaliteedijuhtimissüsteem vastab standardi ISO 9001:2015 nõuetele (<https://metk.agri.ee/media/1352/download>). Sertifikaat hõlmab sordilehe koostamiseks vajalike majanduskatsete, uute sortide registreerimiskatsete ja sertifitseerimisele kuuluvate seemnepartiide järelkontrolli põldkatsete läbiviimist Viljandi katsekeskuses, Võru katsekeskuses ja Kuusiku katsekeskuses.

MAAELU TEADMUSKESKUS

J. Aamisepa 1, Jõgeva alevik, 48309 Jõgeva maakond (juriidiline aadress)

Teaduse 4, 75501, Saku, Harjumaa

Üldinfo: tel +372 776 6901, +372 5332 4719

Proovide vastuvõtt Sakus: tel +372 5342 9205

e-post: info@metk.agri.ee

Alates 1. jaanuarist 2023 ühinesid Eesti Taimakasvatuse Instituut (ETKI) ja Põllumajandusuuringute Keskus (PMK) üheks asutuseks. Ühendasutuse nimi on Maaelu Teadmuskeskus (METK).

Tegevusvaldkonnad:

- põllumajanduse, maaelu ja maamajanduse valdkonna uuringud, seire, hindamine ja analüüsid, sealhulgas laboratoorsed analüüsid;
- põllumajanduskultuuride sordiaretus ja põldkatsed;
- põllumajandus- ja maaeluvaldkonna teadmussiirde-, nõuande- ja innovatsiooniteenused;
- Euroopa Liidu ühise põllumajanduspoliitika rakendamiseks vajalikud tegevused.

Põhiülesanded:

- Tegevusvaldkonna rakendus- ja alusuuringute tegemine ning seire korraldamine.
- Põllumajanduskultuuride sortide aretamine, säilitusaretus, sortide standardproovide säilitamine ja väljastamine.
- Registreerimis-, majandus-, järelkontrolli- vm põldkatsete teostamine.
- Põllumajanduskultuuride seemnete tootmine ja turustamine.
- Taimede ja mikroorganismide geneetiliste ressursside säilitamine ja uurimine.
- Euroopa Komisjoni põllumajandusliku raamatupidamise andmebaasi kontaktasutuse ülesannete täitmine ja andmebaasi haldamine.
- Turuinfo kogumine, töötlemine ja esitamine EL-i ühiseks põllumajanduspoliitika abinõudeks.

- Kattetulu arvestuse koostamine peamiste põllumajanduskultuuride ja –loomade liikide kaupa erinevatel saagi ja produktiivsuse tasemel.
- Riikliku referentlaboratooriumi, volitatud laboratooriumi ja karantiinjaama ülesannete täitmine.
- Seemnete, taimekahjustajate, väetise, mulla, taimse materjali, sööda ja muu materjali laboratorsete analüüside teostamine.
- Maakasutuse keskkonnamõju uuringute ja seire tegemine.
- Agrotehnoloogiliste ja mullastiku uuringute ning mullaseire tegemine.
- Tegevusvaldkonnas ruumiandmete analüüside tegemine ja tegevusvaldkonna kaardirakendus-teenuste väljatöötamises ja arendamises osalemine.
- EL-i ühise põllumajanduspoliitika hindamistegevuste, seire ja uuringute tegemine ning nende tulemuste levitamine. EL-i ühise põllumajanduspoliitika võrgustiku ülesannete täitmine.
- Põllu- ja maamajanduse valdkonna teadmussiirde koordineerimine ja arendamine.
- Tegevusvaldkonnas koolituste korraldamine.
- Keskuse teadusnõukogu või ministeeriumi poolt määratud ülesannete täitmine.

THE CENTRE OF ESTONIAN RURAL RESEARCH AND KNOWLEDGE

The Centre of Estonian Rural Research and Knowledge (METK) has started operating on the 1st of January 2023.

The new institution will fulfill all the tasks of the Estonian Crop Research Institute and the Agricultural Research Centre.

All previous contact details will remain valid for some time, simultaneously with new addresses in the form firstname.lastname@metk.agri.ee. The homepage of the Centre of Estonian Rural Research and Knowledge is metk.agri.ee, but for the time being, the etki.ee and pmk.agri.ee websites will also remain working.

Field of activity of the Centre of Estonian Rural Research and Knowledge:

- research, monitoring, assessment, and analysis in the field of agriculture, rural life, and rural economy, including laboratory analyses;
- variety breeding and field trials of agricultural crops;
- knowledge transfer, advisory, and innovation services in the field of agriculture and rural life;
- activities necessary for the implementation of the common agricultural policy of the European Union.

METK KATSEKESKUSED

Katsekeskuste põhilised tegevusvaldkonnad

- Sordilehe koostamiseks vajalike majanduskatsete – riiklike sordivõrdluskatsete praktiline korraldamine ja läbiviimine.
Katsetatavad kultuurid: teraviljad, õlikultuurid, kaunviljad, heintaimed, kartul, mais jt. Hinnatakse saaki, kvaliteeti, haiguskindlust ja talvekindlust ehk siis viljelusväärtust Eesti tingimustes.
Majanduskatseid teostavad: Viljandi katsekeskus, Võru katsekeskus, Kuusiku katsekeskus ja alltöövõtjana Eesti Taimekasvatuse Instituut.
- Jätkukatsed Eesti sordilehes olevatele sortidele.
Katsed viiakse läbi vastavalt majanduskatsete metoodikale ning sordid külvatakse ja andmed töödeldakse koos majanduskatse sortidega. Katseandmed avaldatakse kodulehel ning kogumikus.
- Sertifitseeritud seemnepartiide järelkontrolli põldkatsete läbiviimine.
Katsetatavad kultuurid: teraviljad, kaunviljad, heintaimed, õlikultuurid jt. Hinnatakse seemnepartiide sordiehtsust ja määratakse sordipuhtus. Katseid teostab Viljandi katsekeskus.
- Sortide registreerimiskatsete ehk EÜP (eristatavuse, ühtlikkuse ja püsivuse) katsete läbiviimine.
Katsetatavad kultuurid: teraviljad ja hernes. Hinnatakse sordi vastavust eristatavuse, ühtlikkuse ja püsivuse nõuetele. Katseid teostab Viljandi katsekeskus.
- Teaduskatsed
- Erikatsed - tehnoloogiate ja sortide võrdlused, demokatsed esitlusteks jms.

Põhilised koostööpartnerid Eestis on Eesti Taimekasvatuse Instituut, AS Baltic Agro, Scandagra Eesti AS, Bayer Crop Science Eesti, BASF, Older Grupp OÜ, Seedtrade OÜ, Asat OÜ, Syngenta Eesti ning Saksamaa, Hollandi, Soome, Rootsi, Norra, Poola, Inglismaa ja Taani sordiaretusfirmad.

METK VARIETY TESTING CENTRES

Activities, tasks:

- VCU tests for agricultural crops
- Postregistration trials for varieties in Estonian Variety List
- Post-Control tests of certified seed lots
- DUS tests of cereals and pea
- Carrying out field testing by request
- Performing scientific field experiments: fertilization, agro-technic systems, crops productivity, organic agriculture

- Management of agricultural park: sample field trials, orchard and berry garden, vegetables and decorative garden, collection garden of field crops, herbal and spice plants, lime kiln and burning, lawn samples, irrigation systems etc

Our major collaboration partners are Estonian Crop Research Institute, AS Baltic Agro, Scandagra Eesti AS, Bayer CropScience Eesti, BASF, Older Grupp OÜ, Seedtrade OÜ, Asat OÜ, Syngenta Eesti and the breeding companies from Germany, Netherlands, Finland, Sweden, Norway, Poland, Great Britain and Denmark.

SORDIVÕRDLUSKATSETE METOODIKA

Riiklikke sordivõrdluskatseid tellib METK-lt Põllumajandus- ja Toiduameti (PTA) mahepõllumajanduse ja seemne osakond, kus on ka välja töötatud kõigi katsetatavate kultuuride meetoodikad majanduskatsete läbiviimiseks:

<https://pta.agri.ee/pollumehele-ja->

[maaomanikule/taimekasvatus/sordid#majanduskatsete-meto](https://pta.agri.ee/pollumehele-ja-)

Katse eesmärk on võrrelda erinevaid sorte ühesugustes kasvutingimustes.

Kõik katsed on ühefaktorilised vastavalt kultuurile, kas haigustõrjega või ilma. Katse kestab vähemalt kaks aastat.

Valitud katseala peab olema võimalikult ühtlase mullastiku ja reljeefiga, nii et kõik katses olevad sordid oleksid võimalikult võrdsetes tingimustes.

Katsete mullaharimisel rakendatakse traditsioonilist künnipõhist tehnoloogiat.

Katselapi suurus sõltub kasutatavast tehnikast (9-10 m²).

Majanduskatses on sordid juhusliku paigutuse meetodil neljas korduses.

Katsealuste sortide viljelusväärtust võrreldakse standardsortide keskmisega.

Väetamisel ja keemilisel taimekaitsel järgitakse „Integreeritud taimekaitse suuniseid“.

Kasvuaegseteks hooldustöödeks on umbrohu-, kahjuri- ja haigustõrje.

Majanduskatseid ei vihmutata (ka põua korral).

Katse külvatatakse reaskülvis 10...15 cm reavahega, meetoodikas määratud külvinormiga järgmise valemi järgi:

$$\text{Külvinorm (kg/ha)} = \frac{\text{idanevate seemnete arv m}^2(\text{tk}) \times 1000 \text{ tera mass (g)} \times 100}{\text{idanevus (\%)} \times \text{puhtus (\%)}}$$

Kasvuaegsed vaatlused võimaldavad sordi põhjalikku hindamist ja aitavad põhjendada kujunenud saaki. Iga vaatlus tehakse kogu katsel samal päeval.

Saagikoristus toimub sortide valmivuse järjekorras. Sordi kõik kordused koristatakse samal päeval.

Katselappide saagid kuivatatakse, sorteeritakse ja kaalutakse. Sordi arvestuslik saak kujuneb nelja korduse keskmisena.

Kvaliteedianalüüsid sordivõrdluskatsete sortidele tehakse METK Teravilja ja söötade laboris.

Riikliku sordivõrdluskatse edukalt läbinud sordid võetakse Eesti sordilehe nimekirja Sordivalikukomisjoni poolt.

JÄTKUKATSETUS

POST-REGISTRATION TESTING

Alates 2014. aasta kevadest viib METK läbi jätkukatsetust Eesti sordilehes olevatele sortidele. Jätkukatsetus annab katse tellijale võimaluse jätkata majanduskatsed läbinud sortide katsetamist.

Katsetust viiakse läbi vastavalt majanduskatsete meetodikale ning katsekohtade arv liigiti on sama mis majanduskatsetes.

Jätkukatsetuse sordid külvatakse ja andmeid töödeldakse koos majanduskatse sortidega ning katseandmed avaldatakse kodulehel ning kogumikus.

Since 2014 spring METK will carry on the postregistration trials for varieties in Estonian Variety List. Those trials are possibility to continue testing after the end of the official VCU trials.

The testing will be carry out according to the methods of VCU and testing places correspond to the official trial.

The postregistration varieties and data will be process together with VCU varieties. The testing results will be published on the homepage and in publication of testing results.

KVALITEEDINÕUDED TERAVILJADELE

Viljakasvatajatele on kehtestatud vilja müümisel kvaliteedi osas rida nõudmisi.

Sõltuvalt vilja kokkuostjast võidakse lisada ka nõudeid kasvatatavatele sortidele ja/või nõudeid BQM (*Basic Quality System*) sertifikaadile, mis põhimõtteliselt tähendab põllumehhe kvaliteedijuhtimise süsteemi.

Kõige rangemad kvaliteedinõuded on kehtestatud toiduteraviljale. Ühine nõue on toiduteravilja niiskusesisaldusele, mis peab jääma vahemikku 11-14%. Söödateravilja niiskuseks on lubatud maksimaalselt 14%.

Toidu- ja söödaviljas pole kokkuostul lubatud eluskahjureid.

Toidunisu kokkuost toimub kvaliteedikategooriate järgi:

| | <u>I kategooria</u> | <u>II kategooria</u> | <u>III kategooria</u> |
|---------------------------|---------------------|----------------------|-----------------------|
| Mahumass, min g/l (kg/hl) | 765 (77) | 760 (76) | 750 (75) |
| Märg kleepvalk, min % | 28 | 26 | 24 |
| Langemisarv, min s | 275 | 250 | 240 |
| Proteiin kuivaines, min % | 14 | 13 | 12 |

Toidunisu võidakse kokku osta ka madalamate kvaliteedinäitajatega, kuid sel juhul ei tohi jääda mahumass alla 730 g/l (74 kg/hl), märja kleepvalgu sisaldus alla 22%, langemisarv alla 180 sekundi ja proteiini sisaldus kuivaines alla 11%.

Söödanisu kokkuostul on baasmahumass 720 g/l (72 kg/hl).

Toidurukki ja **söödarukki** baasmahumass on min 720 g/l (72 kg/hl) ja toidurukki langemisarv on min 120 sekundit.

Toidukaera kõrgeima kvaliteedi baasmahumass on 540 g/l (54 kg/hl). Toidukaer peab olema ilusa, kaerale omase värvuse (kollane toidukaera sort) ja lõhnaga.

Söödakaera baasmahumass on 520 g/l (52 kg/hl).

Teised söödaviljad:

söödaoder - baasmahumass 620 g/l (62 kg/hl)

söödatritikale - baasmahumass 700 g/l (70 kg/hl).

Rapsi- ja rüpsiseemne niiskusesisaldus peab jääma vahemikku 6-9%, baasiline õlisisaldus proovis on 40%.

Kõrge saagipotentsiaaliga vili jääb paljudel juhtudel oma kvaliteedinäitajatega madala kvaliteediga tootegruppi.

KVALITEEDINÕUDED KAUNVILJADELE

Kokku ostetakse kaunvilju kahel kasutuseesmärgil:

- 1) söödahernes ja -uba;
- 2) toiduhernes ja -uba.

Söödakaunviljadele on üldised nõuded suhteliselt leebed: niiskus 11-14% ja prügilisand maksimaalselt 1%.

Prügilisandi hulka kuuluvad:

- mineraalsed lisandid: kivid, liiv jms;
- orgaanilise päritoluga lisandid: seemnekestad, varre- ja lehetükid jms;
- kahjulik lisand (sealhulgas tungaltera);
- umbrohtude seemned;
- riknenud kaunviljade seemned;
- teiste kultuurtaimede terad ja seemned.

Oluliseks ei loeta katkiste seemnete ja teralisandi hulka, põldoa puhul ka putuka-kahjustustega seemnete hulka.

Toidukaunviljadele esitatavad nõuded on aga märgatavalt täpsemad:

| Kvaliteedinäitaja | Kollane toiduhernes ja roheline toiduhernes | Toiduuba |
|--------------------------------|---|----------|
| Niiskus % | 11-14 | 11-14 |
| Prügilisand % maksimaalselt | 1 | 1 |
| Katkised terad % maksimaalselt | 8 | 4 |
| Värvi puhtus % minimaalselt | 95 | - |
| Putukakahjustused % | - | 3 |
| Teralisand % maksimaalselt | 10 | 10 |

Teralisandi hulka kuuluvad:

- kasvama läinud seemned;
- kahjustatud seemned;
- muljutud seemned;
- alaarenenud seemned;
- teramardikate poolt kahjustatud seemned.

MULDADE KASUTUSSOBIVUSE RAKENDUS PÕLLUKULTUURIDE KASVATAMISEKS A MAP APPLICATION FOR SOIL SUITABILITY RATINGS IN CROP PRODUCTION

Muldade kasutussobivuse kaardirakendus on välja töötatud Maaelu Teadmuskeskuse Põllumajandusuuringute osakonna mullastiku valdkonnas.

Kaardirakendus on mõeldud kasutamiseks põllumajandustootjatele.

Maakasutuse ja põllumajandustootmise planeerimisel on vaja arvestada mullastiku iseärasustega ning sellest tuleneva muldade kasutussobivusega põllumajanduskultuuride kasvatamiseks. Muldade kasutussobivuse hindamisel on olulised nii agronoomilised, keskkonnakaitselised kui ka sotsiaalmajanduslikud aspektid.

Rakendus on leitav:

https://athena.agri.ee/connect/analyst/mobile/#/main?mapcfg=%2FAnalyst%2FName%2FProjects%2Fmuld_kasutussobivus&lang=et

A map application for soil suitability ratings in crop production has been developed by Department of Agricultural Research Field of soil.

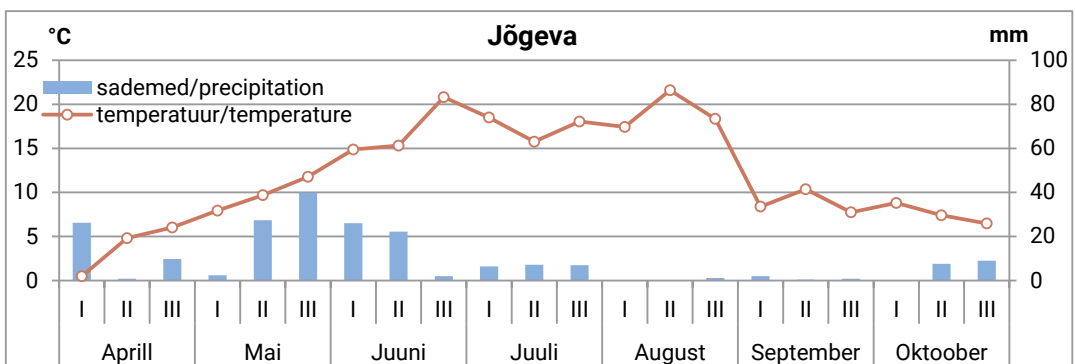
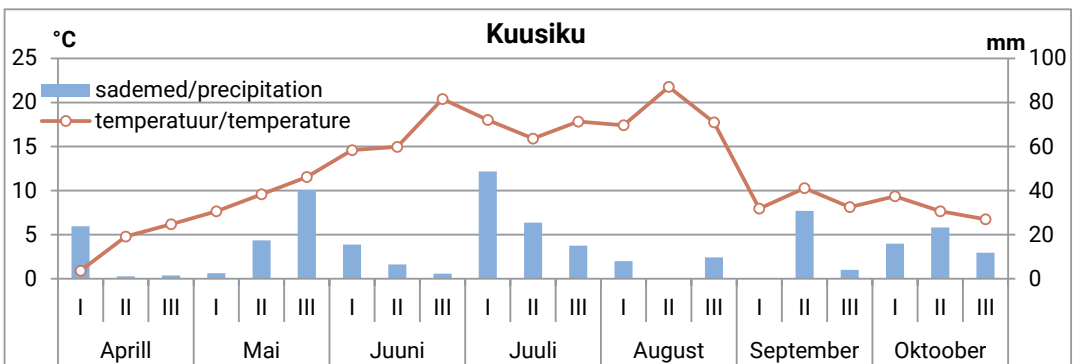
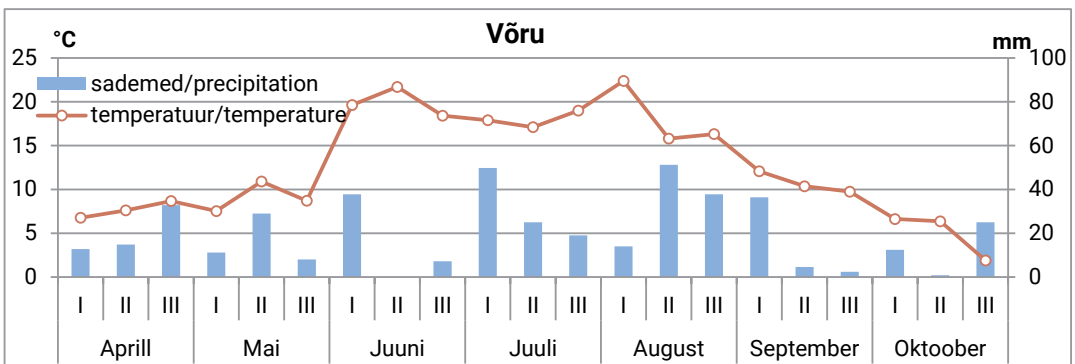
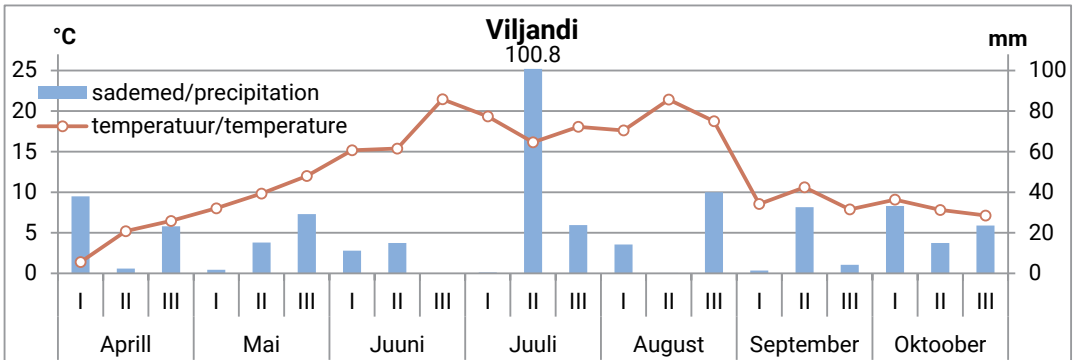
This map application is created for agricultural producers.

For planning of land use for agricultural production the characteristics of soil cover and suitability for agricultural crops should be taken into account. To estimate the soil suitability for agricultural purposes is important to consider agronomic, environmental and socioeconomic aspects.

A map application can be found:

https://athena.agri.ee/connect/analyst/mobile/#/main?mapcfg=%2FAnalyst%2FName%2FProjects%2Fmuld_kasutussobivus&lang=et

ILMASTIK / WEATHER



TALIRUKIS / WINTER RYE

Secale cereale L.

Talirukki sortide tunnustamine 2022*

| | |
|----------|----------|
| Sort | Pind, ha |
| Elvi | 73,39 |
| Sangaste | 56,34 |

* Vastavalt PTA põldtunnustamise andmetele / according to AFB field inspection data

Katse agrotehnika / Agrotechnics of the trial 2021/2022

| VILJANDI | VÕRU | KUUSIKU |
|----------|------|---------|
|----------|------|---------|

Mullaliik / Soil

| | | |
|-------|----|----|
| LP(g) | LP | Kr |
|-------|----|----|

Eelvili / Previous crop

| | | |
|---------------------------------------|---------------------|-------------------------|
| valge mesikas / <i>Melilotus alba</i> | peakapsas / cabbage | mustkesa / black fallow |
|---------------------------------------|---------------------|-------------------------|

Külvikuupäev / Sowing date

| | | |
|------------|------------|------------|
| 14.09.2021 | 16.09.2021 | 10.09.2021 |
|------------|------------|------------|

Külvinorm / Sowing rate, id.tera/m² / germinating seeds per m²
 hübriidsortidel / for hybrids - 200; liinsortidel / for others - 500 id.tera/m²

Väetis (TA kg/ha); väetamise aeg / Fertilizer - level of N-P-K; Time of fertilization

| N | P | K | S | mikrod | N | P | K | S | mikrod | N | P | K | S | mikrod |
|-----------------------------|---|----|----|------------------|------------|----|-----|----|--------|------------|----|----|----|----------------|
| 08.09.2021 | | | | | 15.09.2021 | | | | | 08.09.2021 | | | | |
| 27 | 7 | 16 | 4 | B-0,03 Mg-1,5 | 32 | 35 | 100 | 8 | Mg-2 | 23 | 13 | 52 | 7 | B-0,05 Mg-3 |
| 18.04.2022 | | | | | 12.04.2022 | | | | | 20.04.2022 | | | | |
| 54 | | | 7 | Ca-12 Mg-1,4 | 40 | | | 20 | | 54 | | | 8 | |
| 29.04.2022 | | | | | 13.05.2022 | | | | | 23.05.2022 | | | | |
| 41 | | | 6 | Ca-9 Mg-1,05 | 30 | | | 17 | | 40 | | | 6 | |
| 03.05.2022 | | | | | | | | | | | | | | |
| PK-Max 1,0 l/ha | | | | | | | | | | | | | | |
| 13.05.2022 | | | | | | | | | | | | | | |
| YaraVita Gramitrel 2,0 l/ha | | | | | | | | | | | | | | |
| 30.05.2022 | | | | | | | | | | | | | | |
| Viva Gel KS 37-65 1,0 l/ha | | | | | | | | | | | | | | |
| 122 | 7 | 16 | 17 | Kokku | 102 | 35 | 100 | 45 | Kokku | 117 | 13 | 52 | 21 | Kokku |

Taimekaitse: (norm l/ha, tööt. kuupäev) / Plant protection (litre per hectare, date of the treatment)

| VILJANDI | VÕRU | KUUSIKU |
|--|---------------------|--------------------------|
| Puhtimine / Seed treatment - Vibrance Pro 2,0 l/t seemnete kohta / 2,0 l per 1 t seeds | | |
| 18.10.2021 | 05.05.2022 | 30.09.2021 |
| Komplet - 0,5 l/ha | Mustang - 0,6 l/ha | Legacy 500 SC - 0,1 l/ha |
| Flight Forte - 2,0 l/ha | 01.06.2022 | 20.05.2022 |
| 03.05.2022 | Curbatur - 0,4 l/ha | Ariane S - 2,0 l/ha |
| Legacy 500 SC - 0,2 l/ha | Priaxor - 0,4 l/ha | |
| Trimmer 50 SG - 22,5 g/ha | | |
| 13.05.2022 | | |
| Balaya - 0,5 l/ha | | |
| Flexity - 0,25 l/ha | | |
| 30.05.2022 | | |
| Revytrex - 1,0 l/ha | | |

Talirukki katseandmed

| Sort Variety | Arvestuslik saak / Yield, kg/ha ja % st.keskmisest | | | | | | Talvekindlus, Winter hardiness, 1-9 p (1=halb/bad) | | |
|-----------------|---|-----|-------|-----|---------|-----|--|------|---------|
| | Viljandi | | Võru | | Kuusiku | | Viljandi | Võru | Kuusiku |
| | kg/ha | % | kg/ha | % | kg/ha | % | | | |
| HYH332 | 9488 | 95 | 10206 | 86 | 10500 | 95 | 9,0 | 9,0 | 8,0 |
| HYH334 | 9297 | 93 | 10318 | 87 | 10763 | 97 | 9,0 | 9,0 | 8,5 |
| HYH335 | 9618 | 96 | 10930 | 92 | 10433 | 94 | 9,0 | 9,0 | 8,0 |
| HYH-351 | 10250 | 102 | 11400 | 96 | 11372 | 102 | 9,0 | 9,0 | 8,3 |
| HYH-352 | 9220 | 92 | 11281 | 95 | 10989 | 99 | 9,0 | 9,0 | 8,5 |
| HYH-353 | 9762 | 98 | 10254 | 86 | 11188 | 101 | 9,0 | 9,0 | 8,8 |
| HYH-354 | 10533 | 105 | 10902 | 92 | 11541 | 104 | 9,0 | 9,0 | 8,5 |
| HYH-355 | 9278 | 93 | 10537 | 89 | 10819 | 97 | 9,0 | 9,0 | 8,0 |
| HYH-356 | 10460 | 105 | 11250 | 95 | 11240 | 101 | 9,0 | 9,0 | 8,0 |
| HYH-357 | 10137 | 101 | 10417 | 88 | 11108 | 100 | 9,0 | 9,0 | 8,5 |
| KWS-H218 | 8776 | 88 | 10852 | 91 | 10955 | 99 | 9,0 | 9,0 | 7,8 |
| KWS-H219 | 9477 | 95 | 10599 | 89 | 10887 | 98 | 9,0 | 9,0 | 8,0 |
| KWS-H220 | 9691 | 97 | 11078 | 93 | 10796 | 97 | 9,0 | 9,0 | 7,8 |
| KWS-H221 | 9854 | 98 | 9842 | 83 | 10877 | 98 | 9,0 | 9,0 | 7,8 |
| KWS-H223 | 10228 | 102 | 9928 | 84 | 10527 | 95 | 9,0 | 9,0 | 7,8 |
| KWS-H225 | 9825 | 98 | 10804 | 91 | 10641 | 96 | 9,0 | 9,0 | 7,3 |
| KWS-H228 | 10529 | 105 | 11275 | 95 | 11046 | 100 | 9,0 | 9,0 | 8,3 |
| KWS-H229 | 9925 | 99 | 11840 | 100 | 11031 | 99 | 9,0 | 9,0 | 8,3 |
| KWS-H230 | 10178 | 102 | 11848 | 100 | 11544 | 104 | 9,0 | 9,0 | 8,5 |
| KWS-H231 | 10891 | 109 | 11351 | 96 | 11863 | 107 | 9,0 | 9,0 | 8,0 |
| KWS-H232 | 10682 | 107 | 12424 | 105 | 11125 | 100 | 9,0 | 9,0 | 8,3 |
| KWS-H233 | 9482 | 95 | 11782 | 99 | 10914 | 98 | 9,0 | 9,0 | 8,3 |
| KWS-H234 | 9486 | 95 | 11332 | 95 | 11377 | 103 | 9,0 | 9,0 | 8,0 |
| KWS-H235 | 9955 | 100 | 11322 | 95 | 10621 | 96 | 9,0 | 9,0 | 8,5 |
| KWS-H236 | 9618 | 96 | 12097 | 102 | 11273 | 102 | 9,0 | 9,0 | 8,0 |
| KWS-H237 | 8802 | 88 | 10977 | 93 | 11296 | 102 | 9,0 | 9,0 | 8,0 |
| KWS Livado* | 9827 | 100 | 10560 | 100 | 10887 | 100 | 9,0 | 9,0 | 8,0 |
| SU Performer* | 10182 | | 13173 | | 11309 | | 9,0 | 9,0 | 8,3 |
| PD 5% (LSD) | 752 | | 895 | | 649 | | | | |

* standardsort / standard variety

| Sort Variety | Proteiin k.a, % Protein d.m, % | | | Mahukaal, g/l Volume weight, g/l | | |
|-----------------|-----------------------------------|------|---------|-------------------------------------|------|---------|
| | Viljandi | Võru | Kuusiku | Viljandi | Võru | Kuusiku |
| HYH332 | 10,4 | 8,9 | 9,0 | 743 | 738 | 767 |
| HYH334 | 10,5 | 8,4 | 8,4 | 755 | 757 | 775 |
| HYH335 | 9,8 | 8,5 | 8,2 | 724 | 738 | 748 |
| HYH-351 | 10,5 | 9,0 | 8,8 | 743 | 750 | 768 |
| HYH-352 | 10,4 | 8,7 | 8,6 | 751 | 760 | 780 |
| HYH-353 | 10,9 | 9,3 | 9,0 | 735 | 743 | 760 |
| HYH-354 | 10,5 | 9,1 | 8,7 | 736 | 744 | 767 |
| HYH-355 | 10,9 | 9,2 | 9,7 | 749 | 750 | 778 |
| HYH-356 | 10,3 | 8,7 | 8,5 | 756 | 760 | 782 |
| HYH-357 | 10,3 | 8,8 | 8,8 | 749 | 748 | 779 |
| KWS-H218 | 10,8 | 9,1 | 8,4 | 741 | 754 | 769 |
| KWS-H219 | 10,3 | 8,1 | 8,4 | 730 | 736 | 760 |
| KWS-H220 | 10,1 | 8,8 | 8,7 | 743 | 735 | 766 |
| KWS-H221 | 10,5 | 8,7 | 8,2 | 742 | 746 | 765 |
| KWS-H223 | 10,2 | 8,7 | 8,6 | 741 | 737 | 767 |
| KWS-H225 | 9,9 | 7,9 | 8,0 | 746 | 742 | 765 |
| KWS-H228 | 9,9 | 8,2 | 8,1 | 756 | 757 | 771 |
| KWS-H229 | 9,6 | 8,3 | 7,8 | 749 | 758 | 771 |
| KWS-H230 | 9,7 | 8,9 | 8,4 | 753 | 761 | 774 |
| KWS-H231 | 9,8 | 8,4 | 8,2 | 745 | 744 | 768 |
| KWS-H232 | 9,6 | 8,4 | 8,2 | 737 | 738 | 763 |
| KWS-H233 | 9,3 | 8,4 | 8,2 | 734 | 746 | 763 |
| KWS-H234 | 9,4 | 7,7 | 8,1 | 748 | 754 | 771 |
| KWS-H235 | 9,9 | 8,1 | 7,8 | 748 | 753 | 772 |
| KWS-H236 | 9,7 | 7,9 | 8,2 | 755 | 766 | 782 |
| KWS-H237 | 10,3 | 8,4 | 8,5 | 750 | 756 | 778 |
| KWS Livado* | 10,8 | 9,1 | 9,1 | 753 | 754 | 775 |
| SU Performer* | 9,8 | 8,8 | 7,9 | 743 | 756 | 762 |

* standardsort / standard variety

| Sort Variety | Langemisarv, sek Falling number, sec | | | 1000 tera mass, g 1000 kernel weight, g | | |
|-----------------|---|------|---------|--|------|---------|
| | Viljandi | Võru | Kuusiku | Viljandi | Võru | Kuusiku |
| HYH332 | 234 | 226 | 250 | 32,2 | 32,6 | 32,0 |
| HYH334 | 235 | 229 | 251 | 33,6 | 34,4 | 32,0 |
| HYH335 | 206 | 200 | 238 | 33,3 | 35,2 | 32,0 |
| HYH-351 | 156 | 170 | 248 | 32,5 | 34,0 | 29,1 |
| HYH-352 | 195 | 176 | 221 | 34,0 | 35,5 | 32,3 |
| HYH-353 | 206 | 204 | 216 | 33,8 | 34,4 | 31,5 |
| HYH-354 | 229 | 211 | 235 | 35,1 | 35,7 | 31,5 |
| HYH-355 | 209 | 197 | 225 | 35,6 | 37,0 | 36,0 |
| HYH-356 | 160 | 200 | 211 | 37,6 | 36,1 | 34,7 |
| HYH-357 | 157 | 151 | 218 | 35,1 | 35,3 | 33,4 |
| KWS-H218 | 228 | 230 | 237 | 34,6 | 37,5 | 34,5 |
| KWS-H219 | 208 | 210 | 236 | 39,5 | 36,0 | 33,9 |
| KWS-H220 | 223 | 238 | 228 | 36,3 | 36,9 | 35,2 |
| KWS-H221 | 213 | 219 | 225 | 35,5 | 35,3 | 34,3 |
| KWS-H223 | 242 | 239 | 251 | 35,1 | 36,1 | 34,6 |
| KWS-H225 | 237 | 226 | 209 | 37,3 | 36,2 | 35,9 |
| KWS-H228 | 206 | 221 | 237 | 38,3 | 38,7 | 34,9 |
| KWS-H229 | 197 | 220 | 218 | 38,4 | 39,1 | 35,8 |
| KWS-H230 | 250 | 226 | 220 | 37,3 | 38,6 | 33,9 |
| KWS-H231 | 220 | 218 | 204 | 36,3 | 37,4 | 33,1 |
| KWS-H232 | 239 | 247 | 233 | 36,9 | 37,2 | 34,7 |
| KWS-H233 | 184 | 184 | 218 | 36,5 | 36,8 | 33,9 |
| KWS-H234 | 193 | 190 | 231 | 38,8 | 38,9 | 36,8 |
| KWS-H235 | 205 | 195 | 246 | 36,8 | 38,1 | 35,7 |
| KWS-H236 | 204 | 215 | 216 | 39,2 | 38,6 | 35,9 |
| KWS-H237 | 259 | 220 | 250 | 34,8 | 35,7 | 32,6 |
| KWS Livado* | 181 | 208 | 193 | 33,1 | 32,7 | 36,4 |
| SU Performer* | 177 | 254 | 225 | 34,6 | 37,1 | 31,2 |

* standardsort / standard variety

| Sort Variety | Kasvuaeg, päeva Growing period, days | | | Taimede kõrgus, cm Height of plants, cm | | | Lamandumine, Lodging, 1-9 p (1=ei lamandu/ not lodged) | | |
|-----------------|---|------|---------|--|------|---------|---|------|---------|
| | Viljandi | Võru | Kuusiku | Viljandi | Võru | Kuusiku | Viljandi | Võru | Kuusiku |
| HYH332 | 326 | 315 | 321 | 143 | 134 | 140 | 1,0 | 1,0 | 1,3 |
| HYH334 | 322 | 315 | 321 | 139 | 136 | 142 | 1,0 | 1,0 | 1,3 |
| HYH335 | 324 | 317 | 321 | 144 | 141 | 137 | 1,0 | 1,0 | 1,5 |
| HYH-351 | 324 | 315 | 321 | 146 | 139 | 143 | 1,0 | 1,0 | 1,0 |
| HYH-352 | 322 | 316 | 321 | 141 | 139 | 144 | 1,0 | 1,0 | 1,3 |
| HYH-353 | 324 | 316 | 321 | 152 | 145 | 149 | 1,0 | 1,0 | 1,3 |
| HYH-354 | 322 | 318 | 321 | 149 | 141 | 149 | 1,0 | 1,0 | 1,3 |
| HYH-355 | 321 | 316 | 321 | 142 | 138 | 144 | 1,0 | 1,0 | 1,5 |
| HYH-356 | 328 | 316 | 321 | 138 | 134 | 142 | 1,0 | 1,0 | 1,0 |
| HYH-357 | 322 | 318 | 322 | 151 | 144 | 151 | 1,0 | 1,0 | 1,0 |
| KWS-H218 | 328 | 316 | 321 | 145 | 146 | 148 | 1,0 | 1,0 | 1,0 |
| KWS-H219 | 322 | 315 | 321 | 137 | 138 | 139 | 1,0 | 1,0 | 1,5 |
| KWS-H220 | 322 | 316 | 321 | 134 | 134 | 139 | 1,0 | 1,0 | 1,8 |
| KWS-H221 | 326 | 316 | 321 | 142 | 140 | 141 | 1,0 | 1,0 | 1,3 |
| KWS-H223 | 322 | 316 | 322 | 134 | 131 | 138 | 1,0 | 1,0 | 1,5 |
| KWS-H225 | 322 | 315 | 322 | 137 | 135 | 140 | 1,0 | 1,0 | 2,0 |
| KWS-H228 | 324 | 316 | 320 | 136 | 138 | 140 | 1,0 | 1,0 | 1,0 |
| KWS-H229 | 326 | 319 | 321 | 143 | 147 | 140 | 1,0 | 1,0 | 3,0 |
| KWS-H230 | 324 | 316 | 322 | 146 | 146 | 145 | 1,0 | 1,0 | 3,5 |
| KWS-H231 | 325 | 316 | 322 | 139 | 134 | 138 | 1,0 | 1,0 | 3,5 |
| KWS-H232 | 322 | 319 | 321 | 140 | 138 | 138 | 1,0 | 1,0 | 2,0 |
| KWS-H233 | 321 | 317 | 321 | 136 | 141 | 138 | 1,0 | 1,0 | 2,0 |
| KWS-H234 | 325 | 319 | 321 | 144 | 142 | 142 | 1,0 | 1,0 | 2,5 |
| KWS-H235 | 324 | 317 | 321 | 149 | 142 | 143 | 1,0 | 1,0 | 2,0 |
| KWS-H236 | 324 | 317 | 321 | 141 | 145 | 143 | 1,0 | 1,0 | 2,8 |
| KWS-H237 | 322 | 318 | 321 | 140 | 139 | 143 | 1,0 | 1,0 | 2,0 |
| KWS Livado* | 326 | 317 | 321 | 143 | 140 | 143 | 1,0 | 1,0 | 2,0 |
| SU Performer* | 321 | 315 | 321 | 141 | 141 | 140 | 1,0 | 1,0 | 1,3 |

* standardsort / standard variety

| Sort Variety | Haigused / Diseases, 1-9 p (1=nakkus puudub/not infected) | | | | | | | | | Kõrreliste tungaltera Claviceps purpurea 1-3 p (1= nakkus puudub/not infected) | | |
|-----------------|--|------|---------|---|------|---------|--|------|---------|--|------|---------|
| | Lumiseen <i>Microdochium nivale</i> | | | Kõrreliste jahukaste <i>Blumeria graminis</i> | | | Äärislaiksus <i>Rynchosporium secalis</i> | | | | | |
| | Viljandi | Võru | Kuusiku | Viljandi | Võru | Kuusiku | Viljandi | Võru | Kuusiku | Viljandi | Võru | Kuusiku |
| HYH332 | 1,0 | 1,0 | 1,0 | 1,0 | 1,0 | 1,0 | 1,0 | 1,0 | 1,0 | 1,3 | 2,0 | 1,0 |
| HYH334 | 1,0 | 1,0 | 1,0 | 1,0 | 1,0 | 1,0 | 1,0 | 1,0 | 1,3 | 1,5 | 2,0 | 1,5 |
| HYH335 | 1,0 | 1,0 | 1,0 | 1,0 | 1,0 | 1,0 | 2,0 | 1,0 | 1,5 | 1,8 | 2,0 | 1,3 |
| HYH-351 | 1,0 | 1,0 | 1,0 | 1,0 | 1,0 | 1,0 | 1,0 | 1,0 | 1,5 | 1,3 | 2,0 | 1,3 |
| HYH-352 | 1,0 | 1,0 | 1,0 | 1,0 | 1,0 | 1,0 | 1,0 | 1,0 | 1,5 | 1,3 | 2,0 | 1,0 |
| HYH-353 | 1,0 | 1,0 | 1,0 | 1,0 | 1,0 | 1,0 | 1,0 | 1,0 | 1,5 | 1,3 | 2,0 | 1,3 |
| HYH-354 | 1,0 | 1,0 | 1,0 | 1,0 | 1,0 | 1,0 | 1,0 | 1,0 | 1,5 | 1,3 | 2,0 | 1,0 |
| HYH-355 | 1,0 | 1,0 | 1,0 | 1,0 | 1,0 | 1,0 | 1,0 | 1,0 | 1,3 | 1,3 | 2,0 | 1,5 |
| HYH-356 | 1,0 | 1,0 | 1,0 | 1,0 | 1,0 | 1,0 | 1,0 | 1,0 | 1,0 | 1,0 | 2,0 | 1,3 |
| HYH-357 | 1,0 | 1,0 | 1,0 | 1,0 | 1,0 | 1,0 | 1,0 | 1,0 | 1,0 | 1,3 | 2,0 | 1,8 |
| KWS-H218 | 1,0 | 1,0 | 1,0 | 1,0 | 1,0 | 1,0 | 1,0 | 1,0 | 1,0 | 1,5 | 2,0 | 1,0 |
| KWS-H219 | 1,0 | 1,0 | 1,0 | 1,0 | 1,0 | 1,0 | 1,0 | 1,0 | 1,3 | 1,0 | 2,0 | 1,3 |
| KWS-H220 | 1,0 | 1,0 | 1,0 | 1,0 | 1,0 | 1,0 | 2,3 | 1,0 | 1,5 | 1,3 | 2,0 | 1,5 |
| KWS-H221 | 1,0 | 1,0 | 1,0 | 1,0 | 1,0 | 1,0 | 1,0 | 1,0 | 1,0 | 1,0 | 2,0 | 1,3 |
| KWS-H223 | 1,0 | 1,0 | 1,0 | 1,0 | 1,0 | 1,0 | 1,8 | 1,0 | 1,0 | 1,3 | 2,0 | 1,3 |
| KWS-H225 | 1,0 | 1,0 | 1,0 | 1,0 | 1,0 | 1,0 | 2,0 | 1,0 | 1,0 | 1,3 | 2,0 | 1,0 |
| KWS-H228 | 1,0 | 1,0 | 1,0 | 1,0 | 1,0 | 1,0 | 1,0 | 1,0 | 1,3 | 1,8 | 2,0 | 1,0 |
| KWS-H229 | 1,0 | 1,0 | 1,0 | 1,0 | 1,0 | 1,0 | 1,0 | 1,0 | 1,3 | 1,3 | 2,0 | 1,5 |
| KWS-H230 | 1,0 | 1,0 | 1,0 | 1,0 | 1,0 | 1,0 | 1,0 | 1,0 | 1,0 | 1,3 | 2,0 | 1,0 |
| KWS-H231 | 1,0 | 1,0 | 1,0 | 1,0 | 1,0 | 1,0 | 1,0 | 1,0 | 1,3 | 1,8 | 2,0 | 1,3 |
| KWS-H232 | 1,0 | 1,0 | 1,0 | 1,0 | 1,0 | 1,0 | 1,0 | 1,0 | 1,0 | 1,8 | 2,0 | 1,0 |
| KWS-H233 | 1,0 | 1,0 | 1,0 | 1,0 | 1,0 | 1,0 | 1,0 | 1,0 | 1,3 | 1,0 | 2,0 | 1,0 |
| KWS-H234 | 1,0 | 1,0 | 1,0 | 1,0 | 1,0 | 1,0 | 1,0 | 1,0 | 1,0 | 1,3 | 2,0 | 1,3 |
| KWS-H235 | 1,0 | 1,0 | 1,0 | 1,0 | 1,0 | 1,0 | 1,0 | 1,0 | 1,0 | 1,3 | 2,0 | 1,3 |
| KWS-H236 | 1,0 | 1,0 | 1,0 | 1,0 | 1,0 | 1,0 | 1,0 | 1,0 | 1,0 | 1,5 | 2,0 | 1,0 |
| KWS-H237 | 1,0 | 1,0 | 1,0 | 1,0 | 1,0 | 1,0 | 1,0 | 1,0 | 1,0 | 1,5 | 2,0 | 1,3 |
| KWS Livado* | 1,0 | 1,0 | 1,0 | 1,0 | 1,0 | 1,0 | 1,0 | 1,0 | 1,3 | 1,3 | 2,0 | 1,0 |
| SU Performer* | 1,0 | 1,0 | 1,0 | 1,0 | 1,0 | 1,0 | 1,0 | 1,0 | 1,0 | 1,3 | 2,0 | 1,3 |

* standardsort / standard variety

TALINISU / WINTER WHEAT

Triticum aestivum L.

Talinisu sortide tunnustamine 2022*

| Sort | Pind, ha | Sort | Pind, ha | Sort | Pind, ha | Sort | Pind, ha |
|---------------------------|----------|------------|----------|-----------|----------|-----------|----------|
| Skagen | 336,48 | RGT Reform | 128,88 | Fredis | 55,86 | Lemmy | 21,00 |
| Creator | 244,46 | Hallfreda | 128,31 | Balitus | 49,14 | Viki | 18,70 |
| Informer | 166,91 | Ramiro | 117,93 | Julie | 44,34 | Aspekt | 17,45 |
| Edvins | 151,03 | Toras | 113,87 | Judita | 38,53 | Bright | 16,50 |
| Effekt | 148,20 | Bohemia | 100,74 | Asory | 35,34 | Euclide | 14,90 |
| KWS Spencer | 143,23 | Ada | 78,42 | Lakaja DS | 31,42 | Perenaise | 13,27 |
| KWS Ahoi | 142,61 | Etana | 62,00 | Ruske | 22,55 | KWS | 5,00 |
| KWS Emil | 137,66 | | | | | Universum | |
| Talispeltanisu Zollernfit | | | | | | | 36,76 |

* Vastavalt PTA põldtunnustamise andmetele / according to AFB field inspection data

Katse agrotehnika / Agrotechnics of the trial 2021/2022

| VILJANDI | VÕRU | KUUSIKU | JÕGEVA |
|--|---------------------|----------------------------|-----------------------------|
| Mullaliik / Soil | | | |
| LP(g) | LP | Kr | KI |
| Eelvili / Previous crop | | | |
| valge mesikas / <i>Melilotus alba</i> | peakapsas / cabbage | mustkesa / black fallow | vahekultuur / intercrops |
| Külvikuupäev / Sowing date | | | |
| 14.09.2021 | 16.09.2021 | 10.09.2021 | 09.09.2021 |

Külvinorm / Sowing rate, 400 id.tera/m² / 400 germinating seeds per m²

Väetis (TA kg/ha); väetamise aeg / Fertilizer - level of N-P-K; Time of fertilization

| VILJANDI | | | | | VÕRU | | | | | KUUSIKU | | | | | JÕGEVA | | | | |
|------------------------------|---|----|---|-------------------|-------------------------------|----|-----|----|--------|------------|----|----|---|-------------------|------------|----|----|----|-------------------|
| N | P | K | S | mikrod | N | P | K | S | mikrod | N | P | K | S | mikrod | N | P | K | S | mikrod |
| 08.09.2021 | | | | | 15.09.2021 | | | | | 08.09.2021 | | | | | 02.09.2021 | | | | |
| 27 | 7 | 16 | 4 | B-0,03; Mg-1,5 | 32 | 35 | 100 | 8 | Mg-2 | 27 | 16 | 62 | 8 | B-0,06; Mg-3,6 | 27 | 16 | 62 | 8 | B-0,06; Mg-3,6 |
| 18.04.2022 | | | | | 12.04.2022 | | | | | 20.04.2022 | | | | | 21.04.2022 | | | | |
| 54 | | | 7 | Ca-12; Mg-1,4 | 40 | | | 20 | | 54 | | | 7 | | 74 | | | 11 | |
| 29.04.2022 | | | | | 03.05.2022 | | | | | 23.05.2022 | | | | | 24.05.2022 | | | | |
| 54 | | | 7 | Ca-12; Mg-1,4 | 30 | | | 17 | | 54 | | | 7 | | 40 | | | 6 | |
| 03.05.2022 | | | | | 13.05.2022 | | | | | 07.06.2022 | | | | | 13.06.2022 | | | | |
| PK-Max - 1,0 l/ha | | | | | 30 | | | | | 17 | | | | | 26 | | | | |
| 13.05.2022 | | | | | YaraVita Gramitrel - 2,0 l/ha | | | | | | | | | | | | | | |
| 25.05.2022 | | | | | | | | | | | | | | | | | | | |
| 25 | 7 | 15 | 4 | B-0,03; Mg-1,4 | | | | | | | | | | | | | | | |
| 30.05.2022 | | | | | | | | | | | | | | | | | | | |
| Viva Gel KS 37-65 - 1,0 l/ha | | | | | | | | | | | | | | | | | | | |
| 15.06.2022 | | | | | | | | | | | | | | | | | | | |
| Delfan - 0,5 l/ha | | | | | 160 | | | | | 14 | | | | | 31 | | | | |
| 13.05.2022 | | | | | 132 | | | | | 35 | | | | | 100 | | | | |
| 15.06.2022 | | | | | 62 | | | | | Kokku | | | | | 161 | | | | |
| 13.05.2022 | | | | | 161 | | | | | 16 | | | | | 62 | | | | |
| 15.06.2022 | | | | | 35 | | | | | Kokku | | | | | 187 | | | | |
| 13.05.2022 | | | | | 187 | | | | | 16 | | | | | 62 | | | | |
| 15.06.2022 | | | | | 32 | | | | | Kokku | | | | | Kokku | | | | |

Taimekaitse: (norm l/ha, töötl. kuupäev) / Plant protection (litre per hectare, date of the treatment)

| VILJANDI | VÕRU | KUUSIKU | JÕGEVA |
|--|---------------------|--------------------------|-------------------------|
| Puhtimine / Seed treatment - Vibrance Duo 2,0 l/t seemnete kohta / 2,0 l per 1 t seeds | | | |
| 18.10.2021 | 05.05.2022 | 30.09.2021 | 28.09.2021 |
| Komplet - 0,5 l/ha | Mustang - 0,6 l/ha | Input - 0,3 l/ha | Komplet - 0,5 l/ha |
| Flight Forte - 2,0 l/ha | 01.06.2022 | Legacy 500 SC - 0,1 l/ha | 19.05.2022 |
| 03.05.2022 | Curbatur - 0,4 l/ha | | Falcon Forte - 0,4 l/ha |
| Legacy 500 SC - 0,2 l/ha | Priaxor - 0,4 l/ha | 20.05.2022 | 20.05.2022 |
| Trimmer 50 SG - 22,5 g/ha | | Ariane S - 2,0 l/ha | Mustang - 0,5 l/ha |
| | | Input - 1,0 l/ha | 20.06.2022 |
| | | | Priaxor - 0,8 l/ha |
| 13.05.2022 | | | |
| Balaya - 0,5 l/ha | | | |
| Flexity - 0,25 l/ha | | | |
| 30.05.2022 | | | |
| Revytrex - 1,0 l/ha | | | |
| 15.06.2022 | | | |
| Variano Xpro - 0,5 l/ha | | | |
| Input Triple - 0,5 l/ha | | | |

Talinisu katseandmed

| Sort Variety | Arvestuslik saak, kg/ha Yield, kg/ha | | | | | | | |
|-----------------------------|---|-----|-------|-----|---------|-----|--------|-----|
| | Viljandi | | Võru | | Kuusiku | | Jõgeva | |
| | kg/ha | % | kg/ha | % | kg/ha | % | kg/ha | % |
| Br 10101P83 (Informer) | 9055 | 124 | 11031 | 122 | 9386 | 116 | 11925 | 112 |
| DNKO 221 | 8943 | 122 | 10376 | 115 | 9138 | 113 | 12094 | 113 |
| DNKO 55 (Biesiada) | 8678 | 119 | 10488 | 116 | 8950 | 110 | 12060 | 113 |
| DNKO 63 | 9210 | 126 | 10147 | 112 | 9433 | 116 | 12047 | 113 |
| KW 2075-19 | 8256 | 113 | 10455 | 116 | 9305 | 115 | 11207 | 105 |
| KW 3014-5-15 (KWS Jubilum) | 7985 | 109 | 10016 | 111 | 9334 | 115 | 11775 | 110 |
| KW4707-4-17 | 8203 | 112 | 10549 | 117 | 9028 | 111 | 11096 | 104 |
| LEU180317 (Polarkap) | 7918 | 108 | 10470 | 116 | 9774 | 120 | 11933 | 112 |
| NOS 512100.12 | 9115 | 125 | 10694 | 118 | 9625 | 119 | 12033 | 113 |
| NOS 514189.05 | 8947 | 122 | 10736 | 119 | 9094 | 112 | 12001 | 112 |
| STHD7529 | 7347 | 100 | 9400 | 104 | 8989 | 111 | 10812 | 101 |
| SW 14463 (Kask) | 8242 | 113 | 9694 | 107 | 8942 | 110 | 11442 | 107 |
| SW 35651 (Lavender) | 8981 | 123 | 10178 | 112 | 9061 | 112 | 10992 | 103 |
| WPB 14DH0551-10 (WPB Ennis) | 8653 | 118 | 9843 | 109 | 8862 | 109 | 9902 | 93 |
| Ada* | 7243 | 100 | 9560 | 100 | 8098 | 100 | 11047 | 100 |
| Fredis* | 6676 | | 7361 | | 7532 | | 9516 | |
| KWS Emil* | 7388 | | 9288 | | 8044 | | 10805 | |
| Skagen* | 7967 | | 9994 | | 8809 | | 11386 | |
| PD5% (LSD) | 534 | | 581 | | 1012 | | 504 | |

Jätukatse / postregistration

| | | | | | | | | |
|------------|------|-----|-------|-----|------|-----|-------|-----|
| Bright | 8018 | 110 | 10471 | 116 | 8782 | 108 | 12193 | 114 |
| Faxe | 8250 | 113 | 10259 | 113 | 9486 | 117 | 11873 | 111 |
| KWS Ahoi | 7070 | 97 | 10012 | 111 | 9142 | 113 | - | - |
| Valhal | 8503 | 116 | 9822 | 109 | 8096 | 100 | 11140 | 104 |
| Ada* | 7243 | 100 | 9560 | 100 | 8098 | 100 | 11047 | 100 |
| Fredis* | 6676 | | 7361 | | 7532 | | 9516 | |
| KWS Emil* | 7388 | | 9288 | | 8044 | | 10805 | |
| Skagen* | 7967 | | 9994 | | 8809 | | 11386 | |
| PD5% (LSD) | 424 | | 518 | | 960 | | 410 | |

* standardsort / standard variety

| Sort Variety | Talvekindlus, Winter hardiness, 1-9 p (1=halb/bad) | | | | Kasvuaeg, päeva Growing period, days | | | |
|-----------------------------|--|------|---------|--------|---|------|---------|--------|
| | Viljandi | Võru | Kuusiku | Jõgeva | Viljandi | Võru | Kuusiku | Jõgeva |
| Br 10101P83 (Informer) | 9,0 | 9,0 | 6,8 | 7,0 | 318 | 319 | 323 | 328 |
| DNKO 221 | 9,0 | 9,0 | 7,8 | 8,0 | 316 | 317 | 321 | 325 |
| DNKO 55 (Biesiada) | 9,0 | 9,0 | 8,3 | 8,0 | 315 | 316 | 323 | 325 |
| DNKO 63 | 9,0 | 9,0 | 8,5 | 8,0 | 316 | 316 | 321 | 325 |
| KW 2075-19 | 9,0 | 9,0 | 8,5 | 7,5 | 318 | 317 | 323 | 326 |
| KW 3014-5-15 (KWS Jubilum) | 9,0 | 9,0 | 8,5 | 8,0 | 318 | 317 | 322 | 325 |
| KW4707-4-17 | 9,0 | 9,0 | 8,0 | 7,3 | 314 | 314 | 320 | 325 |
| LEU180317 (Polarkap) | 9,0 | 9,0 | 8,8 | 8,0 | 315 | 315 | 322 | 324 |
| NOS 512100.12 | 9,0 | 9,0 | 8,0 | 7,3 | 317 | 317 | 323 | 326 |
| NOS 514189.05 | 9,0 | 9,0 | 8,8 | 7,8 | 315 | 317 | 322 | 325 |
| STHD7529 | 9,0 | 9,0 | 8,3 | 7,8 | 315 | 316 | 321 | 325 |
| SW 14463 (Kask) | 9,0 | 9,0 | 8,8 | 7,8 | 315 | 316 | 322 | 325 |
| SW 35651 (Lavender) | 9,0 | 9,0 | 8,0 | 7,8 | 318 | 320 | 324 | 326 |
| WPB 14DH0551-10 (WPB Ennis) | 9,0 | 9,0 | 7,3 | 6,5 | 317 | 317 | 322 | 326 |
| Ada* | 9,0 | 9,0 | 7,8 | 8,0 | 314 | 314 | 319 | 324 |
| Fredis* | 9,0 | 9,0 | 8,0 | 8,0 | 315 | 313 | 317 | 321 |
| KWS Emil* | 9,0 | 9,0 | 8,8 | 8,0 | 315 | 314 | 320 | 323 |
| Skagen* | 9,0 | 9,0 | 8,8 | 8,0 | 315 | 317 | 324 | 329 |

Jätukutse / postregistration

| | | | | | | | | |
|-----------|-----|-----|-----|-----|-----|-----|-----|-----|
| Bright | 9,0 | 9,0 | 8,5 | 8,0 | 316 | 315 | 322 | 325 |
| Faxe | 9,0 | 9,0 | 8,5 | 8,0 | 316 | 317 | 323 | 318 |
| KWS Ahoi | 9,0 | 9,0 | 7,5 | - | 315 | 314 | 321 | - |
| Valhal | 9,0 | 9,0 | 8,3 | 8,0 | 317 | 320 | 323 | 330 |
| Ada* | 9,0 | 9,0 | 7,8 | 8,0 | 314 | 314 | 319 | 324 |
| Fredis* | 9,0 | 9,0 | 8,0 | 8,0 | 315 | 313 | 317 | 321 |
| KWS Emil* | 9,0 | 9,0 | 8,8 | 8,0 | 315 | 314 | 320 | 323 |
| Skagen* | 9,0 | 9,0 | 8,8 | 8,0 | 315 | 317 | 324 | 329 |

* standardsort / standard variety

| Sort Variety | Langemisarv, sek Falling number, sec | | | | Kleepvalk, % Glue protein, % | | | |
|-----------------------------|---|------|---------|--------|---------------------------------|------|---------|--------|
| | Viljandi | Võru | Kuusiku | Jõgeva | Viljandi | Võru | Kuusiku | Jõgeva |
| Br 10101P83 (Informer) | 272 | 305 | 284 | 296 | 23,5 | 22,2 | 25,3 | 27,7 |
| DNKO 221 | 225 | 228 | 296 | 268 | 24,2 | 22,2 | 28,1 | 29,6 |
| DNKO 55 (Biesiada) | 244 | 255 | 270 | 282 | 24,6 | 21,1 | 29,9 | 27,6 |
| DNKO 63 | 282 | 245 | 269 | 294 | 23,8 | 25,1 | 32,1 | 32,1 |
| KW 2075-19 | 298 | 259 | 244 | 232 | 27,7 | 23,6 | 27,4 | 29,2 |
| KW 3014-5-15 (KWS Jubilum) | 359 | 350 | 342 | 339 | 28,2 | 25,9 | 29,3 | 30,9 |
| KW4707-4-17 | 258 | 200 | 252 | 259 | 26,5 | 22,9 | 30,3 | 28,2 |
| LEU180317 (Polarkap) | 261 | 302 | 285 | 297 | 28,8 | 24,7 | 29,6 | 30,9 |
| NOS 512100.12 | 241 | 190 | 287 | 277 | 24,3 | 22,1 | 24,2 | 27,4 |
| NOS 514189.05 | 309 | 291 | 306 | 287 | 24,8 | 22,2 | 26,5 | 26,4 |
| STHD7529 | 283 | 243 | 203 | 268 | 29,2 | 25,5 | 36,3 | 32,5 |
| SW 14463 (Kask) | 309 | 330 | 295 | 330 | 30,4 | 23,2 | 32,1 | 34,0 |
| SW 35651 (Lavender) | 230 | 267 | 305 | 279 | 31,7 | 21,5 | 29,7 | 31,5 |
| WPB 14DH0551-10 (WPB Ennis) | 304 | 330 | 333 | 319 | 27,7 | 24,4 | 28,2 | 32,0 |
| Ada* | 283 | 294 | 321 | 319 | 31,6 | 26,1 | 32,6 | 34,6 |
| Fredis* | 267 | 263 | 234 | 294 | 35,4 | 35,5 | 34,5 | 38,2 |
| KWS Emil* | 175 | 221 | 265 | 253 | 29,0 | 24,6 | 29,0 | 29,5 |
| Skagen* | 344 | 330 | 267 | 367 | 30,5 | 26,3 | 28,0 | 33,1 |

Jätukatse / postregistration

| | | | | | | | | |
|-----------|-----|-----|-----|-----|------|------|------|------|
| Bright | 259 | 296 | 283 | 247 | 31,3 | 27,1 | 33,9 | 32,4 |
| Faxe | 285 | 265 | 273 | 273 | 26,6 | 21,0 | 25,0 | 27,9 |
| KWS Ahoi | 346 | 328 | 374 | - | 23,9 | 22,4 | 24,6 | - |
| Valhal | 251 | 268 | 254 | 245 | 30,8 | 25,6 | 33,9 | 33,9 |
| Ada* | 283 | 294 | 321 | 319 | 31,6 | 26,1 | 32,6 | 34,6 |
| Fredis* | 267 | 263 | 234 | 294 | 35,4 | 35,5 | 34,5 | 38,2 |
| KWS Emil* | 175 | 221 | 265 | 253 | 29,0 | 24,6 | 29,0 | 29,5 |
| Skagen* | 344 | 330 | 267 | 367 | 30,5 | 26,3 | 28,0 | 33,1 |

* standardsort / standard variety

| Sort Variety | Proteiin kuivaines, % Protein d.m, % | | | | Mahukaal, g/l Volume weight, g/l | | | |
|-----------------------------|---|------|---------|--------|-------------------------------------|------|---------|--------|
| | Viljandi | Võru | Kuusiku | Jõgeva | Viljandi | Võru | Kuusiku | Jõgeva |
| Br 10101P83 (Informer) | 12,7 | 10,9 | 12,5 | 13,0 | 759 | 766 | 800 | 807 |
| DNKO 221 | 12,0 | 10,6 | 12,4 | 12,3 | 770 | 759 | 807 | 817 |
| DNKO 55 (Biesiada) | 12,8 | 11,5 | 14,1 | 12,6 | 777 | 759 | 779 | 799 |
| DNKO 63 | 12,2 | 11,5 | 13,4 | 12,8 | 755 | 752 | 781 | 800 |
| KW 2075-19 | 12,7 | 11,6 | 12,5 | 13,0 | 771 | 769 | 798 | 799 |
| KW 3014-5-15 (KWS Jubilum) | 12,8 | 12,3 | 13,1 | 13,4 | 721 | 712 | 754 | 764 |
| KW4707-4-17 | 11,5 | 11,2 | 12,9 | 12,0 | 759 | 738 | 780 | 795 |
| LEU180317 (Polarkap) | 13,0 | 11,6 | 13,3 | 12,9 | 784 | 777 | 814 | 812 |
| NOS 512100.12 | 11,5 | 10,7 | 11,6 | 12,1 | 740 | 722 | 760 | 774 |
| NOS 514189.05 | 11,9 | 10,6 | 12,2 | 12,3 | 780 | 779 | 803 | 810 |
| STHD7529 | 13,7 | 12,0 | 15,1 | 13,9 | 773 | 750 | 791 | 810 |
| SW 14463 (Kask) | 12,8 | 11,3 | 13,4 | 13,3 | 751 | 735 | 758 | 793 |
| SW 35651 (Lavender) | 12,4 | 10,9 | 12,9 | 12,9 | 779 | 773 | 792 | 808 |
| WPB 14DH0551-10 (WPB Ennis) | 12,2 | 11,1 | 12,7 | 13,2 | 764 | 748 | 774 | 800 |
| Ada* | 14,0 | 12,3 | 14,2 | 14,4 | 802 | 798 | 816 | 824 |
| Fredis* | 14,9 | 14,4 | 14,4 | 14,8 | 803 | 764 | 811 | 807 |
| KWS Emil* | 12,6 | 11,3 | 12,8 | 12,5 | 762 | 755 | 798 | 792 |
| Skagen* | 13,5 | 12,0 | 12,7 | 13,9 | 767 | 769 | 789 | 803 |

Jätukatse / postregistration

| | | | | | | | | |
|-----------|------|------|------|------|-----|-----|-----|-----|
| Bright | 12,7 | 11,4 | 14,0 | 13,0 | 785 | 780 | 807 | 815 |
| Faxe | 12,9 | 11,0 | 12,5 | 13,0 | 758 | 769 | 796 | 809 |
| KWS Ahoi | 12,4 | 11,9 | 12,5 | - | 779 | 771 | 808 | - |
| Valhal | 12,7 | 11,6 | 14,1 | 13,6 | 753 | 765 | 793 | 798 |
| Ada* | 14,0 | 12,3 | 14,2 | 14,4 | 802 | 798 | 816 | 824 |
| Fredis* | 14,9 | 14,4 | 14,4 | 14,8 | 803 | 764 | 811 | 807 |
| KWS Emil* | 12,6 | 11,3 | 12,8 | 12,5 | 762 | 755 | 798 | 792 |
| Skagen* | 13,5 | 12,0 | 12,7 | 13,9 | 767 | 769 | 789 | 803 |

* standardsort / standard variety

| Sort Variety | Gluteeninindeks, % Gluten index, % | | | | Zeleny arv, ml Zeleny value, ml | | | |
|-----------------------------|---------------------------------------|------|---------|--------|------------------------------------|------|---------|--------|
| | Viljandi | Võru | Kuusiku | Jõgeva | Viljandi | Võru | Kuusiku | Jõgeva |
| Br 10101P83 (Informer) | 99 | 97 | 83 | 82 | 35 | 22 | 35 | 38 |
| DNKO 221 | 96 | 82 | 61 | 63 | 30 | 26 | 36 | 30 |
| DNKO 55 (Biesiada) | 95 | 99 | 96 | 97 | 35 | 25 | 49 | 35 |
| DNKO 63 | 61 | 56 | 46 | 49 | 31 | 24 | 43 | 40 |
| KW 2075-19 | 86 | 85 | 78 | 79 | 35 | 27 | 37 | 39 |
| KW 3014-5-15 (KWS Jubilum) | 83 | 88 | 72 | 86 | 36 | 31 | 39 | 43 |
| KW4707-4-17 | 53 | 69 | 49 | 62 | 25 | 22 | 37 | 30 |
| LEU180317 (Polarkap) | 80 | 74 | 66 | 63 | 36 | 30 | 45 | 38 |
| NOS 512100.12 | 45 | 50 | 45 | 39 | 24 | 22 | 30 | 29 |
| NOS 514189.05 | 82 | 73 | 75 | 82 | 28 | 24 | 34 | 31 |
| STHD7529 | 73 | 78 | 45 | 64 | 39 | 30 | 53 | 43 |
| SW 14463 (Kask) | 38 | 70 | 37 | 44 | 33 | 26 | 49 | 40 |
| SW 35651 (Lavender) | 70 | 71 | 20 | 17 | 30 | 22 | 40 | 37 |
| WPB 14DH0551-10 (WPB Ennis) | 56 | 64 | 58 | 48 | 28 | 22 | 34 | 41 |
| Ada* | 70 | 65 | 61 | 58 | 43 | 31 | 48 | 48 |
| Fredis* | 54 | 44 | 48 | 46 | 51 | 45 | 53 | 51 |
| KWS Emil* | 56 | 56 | 46 | 53 | 32 | 24 | 40 | 33 |
| Skagen* | 73 | 75 | 58 | 67 | 41 | 30 | 36 | 47 |

Jätukukitse / postregistration

| | | | | | | | | |
|-----------|----|----|----|----|----|----|----|----|
| Bright | 41 | 54 | 34 | 32 | 35 | 28 | 50 | 40 |
| Faxe | 97 | 97 | 95 | 93 | 37 | 28 | 37 | 38 |
| KWS Ahoi | 96 | 95 | 90 | - | 31 | 27 | 34 | - |
| Valhal | 31 | 35 | 36 | 32 | 34 | 25 | 48 | 44 |
| Ada* | 70 | 65 | 61 | 58 | 43 | 31 | 48 | 48 |
| Fredis* | 54 | 44 | 48 | 46 | 51 | 45 | 53 | 51 |
| KWS Emil* | 56 | 56 | 46 | 53 | 32 | 24 | 40 | 33 |
| Skagen* | 73 | 75 | 58 | 67 | 41 | 30 | 36 | 47 |

* standardsort / standard variety

| Sort Variety | 1000 tera mass, g 1000 kernel weight, g | | | |
|-----------------------------|--|------|---------|--------|
| | Vijandi | Võru | Kuusiku | Jõgeva |
| Br 10101P83 (Informer) | 41,7 | 40,8 | 43,7 | 43,8 |
| DNKO 221 | 38,4 | 35,3 | 36,2 | 39,3 |
| DNKO 55 (Biesiada) | 43,0 | 40,3 | 38,1 | 46,0 |
| DNKO 63 | 40,2 | 40,6 | 37,5 | 42,0 |
| KW 2075-19 | 43,2 | 44,3 | 42,5 | 48,1 |
| KW 3014-5-15 (KWS Jubilum) | 32,5 | 33,5 | 36,4 | 36,0 |
| KW4707-4-17 | 36,1 | 34,0 | 34,1 | 39,0 |
| LEU180317 (Polarkap) | 38,1 | 38,9 | 44,2 | 44,5 |
| NOS 512100.12 | 38,1 | 35,6 | 38,0 | 39,2 |
| NOS 514189.05 | 36,1 | 34,7 | 34,3 | 38,0 |
| STHD7529 | 33,4 | 31,7 | 35,4 | 36,5 |
| SW 14463 (Kask) | 34,1 | 33,1 | 36,6 | 37,0 |
| SW 35651 (Lavender) | 35,6 | 33,4 | 35,6 | 34,7 |
| WPB 14DH0551-10 (WPB Ennis) | 38,5 | 37,3 | 40,2 | 40,9 |
| Ada* | 33,1 | 33,4 | 32,3 | 36,2 |
| Fredis* | 37,5 | 34,4 | 36,8 | 38,0 |
| KWS Emil* | 36,7 | 35,7 | 38,4 | 39,5 |
| Skagen* | 36,8 | 39,6 | 40,5 | 41,0 |

Jätukutse / postregistration

| | | | | |
|-----------|------|------|------|------|
| Bright | 37,0 | 36,4 | 33,8 | 37,8 |
| Faxe | 41,3 | 42,9 | 45,1 | 44,8 |
| KWS Ahoi | 29,9 | 32,0 | 36,0 | - |
| Valhal | 35,9 | 36,1 | 37,0 | 39,0 |
| Ada* | 33,1 | 33,4 | 32,3 | 36,2 |
| Fredis* | 37,5 | 34,4 | 36,8 | 38,0 |
| KWS Emil* | 36,7 | 35,7 | 38,4 | 39,5 |
| Skagen* | 36,8 | 39,6 | 40,5 | 41,0 |

* standardsort / standard variety

| Sort Variety | Taimede kõrgus, cm Height of plants, cm | | | | Lamandumine / Lodging, 1-9 palli/points (1=ei lamandu/not lodged) | | | |
|-----------------------------|--|------|---------|--------|---|------|---------|--------|
| | Viljandi | Võru | Kuusiku | Jõgeva | Viljandi | Võru | Kuusiku | Jõgeva |
| Br 10101P83 (Informer) | 91 | 95 | 89 | 92 | 1,0 | 1,0 | 1,0 | 1,0 |
| DNKO 221 | 86 | 93 | 92 | 97 | 1,0 | 1,0 | 1,0 | 1,0 |
| DNKO 55 (Biesiada) | 91 | 98 | 88 | 99 | 1,0 | 1,0 | 1,0 | 1,0 |
| DNKO 63 | 83 | 86 | 83 | 88 | 1,0 | 1,0 | 1,0 | 1,0 |
| KW 2075-19 | 96 | 101 | 94 | 100 | 1,0 | 1,0 | 2,0 | 1,0 |
| KW 3014-5-15 (KWS Jubilum) | 82 | 88 | 87 | 90 | 1,0 | 1,0 | 1,0 | 1,0 |
| KW4707-4-17 | 82 | 91 | 88 | 92 | 1,0 | 1,0 | 1,0 | 1,0 |
| LEU180317 (Polarkap) | 88 | 91 | 89 | 92 | 1,0 | 1,0 | 1,0 | 1,0 |
| NOS 512100.12 | 88 | 92 | 87 | 94 | 1,0 | 1,0 | 1,0 | 1,0 |
| NOS 514189.05 | 83 | 90 | 82 | 90 | 1,0 | 1,0 | 1,0 | 1,0 |
| STHD7529 | 85 | 86 | 86 | 90 | 1,0 | 1,0 | 1,0 | 1,0 |
| SW 14463 (Kask) | 82 | 88 | 83 | 88 | 1,0 | 1,0 | 1,0 | 1,0 |
| SW 35651 (Lavender) | 83 | 89 | 78 | 89 | 1,0 | 1,0 | 1,0 | 1,0 |
| WPB 14DH0551-10 (WPB Ennis) | 78 | 84 | 82 | 81 | 1,0 | 1,0 | 1,0 | 1,0 |
| Ada* | 101 | 114 | 103 | 117 | 1,0 | 1,0 | 1,0 | 1,0 |
| Fredis* | 78 | 84 | 83 | 86 | 1,0 | 1,0 | 1,0 | 1,0 |
| KWS Emil* | 77 | 83 | 82 | 84 | 1,0 | 1,0 | 1,0 | 1,0 |
| Skagen* | 86 | 94 | 91 | 98 | 1,0 | 1,0 | 3,3 | 1,0 |

Jätukatse / postregistration

| | | | | | | | | |
|-----------|-----|-----|-----|-----|-----|-----|-----|-----|
| Bright | 87 | 92 | 90 | 93 | 1,0 | 1,0 | 1,0 | 1,0 |
| Faxe | 86 | 91 | 94 | 98 | 1,0 | 1,0 | 1,3 | 1,0 |
| KWS Ahoi | 72 | 82 | 84 | - | 1,0 | 1,0 | 1,8 | - |
| Valhal | 86 | 90 | 83 | 93 | 1,0 | 1,0 | 1,0 | 1,0 |
| Ada* | 101 | 114 | 103 | 117 | 1,0 | 1,0 | 1,0 | 1,0 |
| Fredis* | 78 | 84 | 83 | 86 | 1,0 | 1,0 | 1,0 | 1,0 |
| KWS Emil* | 77 | 83 | 82 | 84 | 1,0 | 1,0 | 1,0 | 1,0 |
| Skagen* | 86 | 94 | 91 | 98 | 1,0 | 1,0 | 3,3 | 1,0 |

* standardsort / standard variety

| Sort Variety | Haigused / Diseases, 1-9 palli/points (1=nakkus puudub/not infected) | | | | | | | |
|-----------------------------|---|------|---------|--------|--|------|---------|--------|
| | Nisu pruunlaikus <i>Drechslera tritici-repentis</i> | | | | Kõrreliste helelaikus <i>Septoria spp</i> | | | |
| | Viljandi | Võru | Kuusiku | Jõgeva | Viljandi | Võru | Kuusiku | Jõgeva |
| | Br 10101P83 (Informer) | 2,3 | 3,0 | 3,0 | 5,5 | 3,5 | 3,0 | 2,3 |
| DNKO 221 | 2,3 | 3,0 | 2,0 | 5,8 | 4,3 | 4,0 | 2,3 | 6,8 |
| DNKO 55 (Biesiada) | 2,0 | 2,0 | 2,0 | 6,5 | 4,3 | 5,0 | 3,0 | 6,3 |
| DNKO 63 | 2,0 | 2,0 | 2,0 | 6,0 | 3,8 | 4,0 | 2,5 | 6,5 |
| KW 2075-19 | 2,3 | 2,0 | 1,8 | 5,5 | 2,8 | 3,0 | 2,8 | 6,0 |
| KW 3014-5-15 (KWS Jubilum) | 1,5 | 2,5 | 2,0 | 6,0 | 3,0 | 3,0 | 2,3 | 5,5 |
| KW4707-4-17 | 1,3 | 2,0 | 1,5 | 5,5 | 3,3 | 2,0 | 2,3 | 6,0 |
| LEU180317 (Polarkap) | 2,3 | 3,5 | 2,3 | 5,5 | 3,0 | 4,0 | 2,5 | 5,5 |
| NOS 512100.12 | 1,3 | 3,0 | 2,0 | 6,0 | 3,5 | 3,0 | 2,5 | 6,0 |
| NOS 514189.05 | 1,0 | 1,5 | 1,5 | 5,8 | 3,5 | 2,0 | 1,8 | 6,0 |
| STHD7529 | 1,0 | 4,0 | 1,3 | 5,8 | 3,3 | 4,0 | 2,0 | 5,5 |
| SW 14463 (Kask) | 1,3 | 3,5 | 1,8 | 6,0 | 3,0 | 4,0 | 2,3 | 6,0 |
| SW 35651 (Lavender) | 2,3 | 2,0 | 2,0 | 6,0 | 3,8 | 3,0 | 2,3 | 7,0 |
| WPB 14DH0551-10 (WPB Ennis) | 3,0 | 3,0 | 2,0 | 6,0 | 3,3 | 4,0 | 3,0 | 5,5 |
| Ada* | 1,8 | 5,0 | 3,5 | 5,8 | 3,3 | 6,0 | 4,0 | 5,5 |
| Fredis* | 3,5 | 6,0 | 3,3 | 6,5 | 4,0 | 6,0 | 4,3 | 7,0 |
| KWS Emil* | 3,3 | 3,5 | 2,0 | 6,0 | 3,8 | 5,0 | 2,8 | 7,0 |
| Skagen* | 1,5 | 3,0 | 1,8 | 5,5 | 3,3 | 3,0 | 1,8 | 6,0 |

Jätukutse / postregistration

| | | | | | | | | |
|-----------|-----|-----|-----|-----|-----|-----|-----|-----|
| Bright | 2,3 | 3,0 | 3,0 | 5,5 | 3,5 | 3,0 | 3,0 | 4,3 |
| Faxe | 2,3 | 2,0 | 2,0 | 5,5 | 3,0 | 3,0 | 2,3 | 5,5 |
| KWS Ahoi | 1,3 | 2,0 | 2,0 | - | 3,0 | 2,0 | 2,8 | - |
| Valhal | 1,3 | 3,0 | 2,5 | 5,3 | 2,8 | 4,0 | 2,5 | 5,3 |
| Ada* | 1,8 | 5,0 | 3,5 | 5,8 | 3,3 | 6,0 | 4,0 | 5,5 |
| Fredis* | 3,5 | 6,0 | 3,3 | 6,5 | 4,0 | 6,0 | 4,3 | 7,0 |
| KWS Emil* | 3,3 | 3,5 | 2,0 | 6,0 | 3,8 | 5,0 | 2,8 | 7,0 |
| Skagen* | 1,5 | 3,0 | 1,8 | 5,5 | 3,3 | 3,0 | 1,8 | 6,0 |

* standardsort / standard variety

| Sort Variety | Haigused / Diseases, 1-9 palli/points (1=nakkus puudub/not infected) | | | | | | | |
|-----------------------------|---|------|---------|--------|--|------|---------|--------|
| | Lumiseen <i>Microdochium nivale</i> | | | | Kõrreliste jahukaste <i>Blumeria graminis</i> | | | |
| | Viljandi | Võru | Kuusiku | Jõgeva | Viljandi | Võru | Kuusiku | Jõgeva |
| Br 10101P83 (Informer) | 1,0 | 1,0 | 1,0 | 3,0 | 2,8 | 1,0 | 1,0 | 2,0 |
| DNKO 221 | 1,0 | 1,0 | 1,0 | 2,0 | 2,8 | 1,0 | 1,0 | 4,5 |
| DNKO 55 (Biesiada) | 1,0 | 1,0 | 1,0 | 2,0 | 4,3 | 1,0 | 1,0 | 6,8 |
| DNKO 63 | 1,0 | 1,0 | 1,0 | 2,0 | 3,0 | 1,0 | 1,0 | 3,5 |
| KW 2075-19 | 1,0 | 1,0 | 1,0 | 2,5 | 2,8 | 1,0 | 1,0 | 4,3 |
| KW 3014-5-15 (KWS Jubilum) | 1,0 | 1,0 | 1,0 | 2,0 | 4,5 | 2,0 | 1,0 | 7,0 |
| KW4707-4-17 | 1,0 | 1,0 | 1,0 | 2,8 | 3,5 | 2,0 | 1,0 | 7,0 |
| LEU180317 (Polarkap) | 1,0 | 1,0 | 1,0 | 2,0 | 3,3 | 2,0 | 1,0 | 2,0 |
| NOS 512100.12 | 1,0 | 1,0 | 1,0 | 2,8 | 4,0 | 2,0 | 1,0 | 6,0 |
| NOS 514189.05 | 1,0 | 1,0 | 1,0 | 2,3 | 3,5 | 1,0 | 1,0 | 3,0 |
| STHD7529 | 1,0 | 1,0 | 1,0 | 2,3 | 3,8 | 1,0 | 1,0 | 2,0 |
| SW 14463 (Kask) | 1,0 | 1,0 | 1,0 | 2,3 | 2,8 | 1,0 | 1,0 | 5,0 |
| SW 35651 (Lavender) | 1,0 | 1,0 | 1,0 | 2,3 | 3,3 | 1,0 | 1,0 | 4,3 |
| WPB 14DH0551-10 (WPB Ennis) | 1,0 | 1,0 | 1,0 | 3,5 | 2,5 | 1,0 | 1,0 | 1,0 |
| Ada* | 1,0 | 1,0 | 1,0 | 2,0 | 3,5 | 1,0 | 1,0 | 5,3 |
| Fredis* | 1,0 | 1,0 | 1,0 | 2,0 | 4,5 | 3,5 | 1,0 | 6,8 |
| KWS Emil* | 1,0 | 1,0 | 1,0 | 2,0 | 5,8 | 1,0 | 1,0 | 4,5 |
| Skagen* | 1,0 | 1,0 | 1,0 | 2,0 | 2,5 | 1,0 | 1,0 | 1,0 |

Jätukatse / postregistration

| | | | | | | | | |
|-----------|-----|-----|-----|-----|-----|-----|-----|-----|
| Bright | 1,0 | 1,0 | 1,0 | 2,0 | 2,3 | 1,0 | 1,0 | 1,0 |
| Faxe | 1,0 | 1,0 | 1,0 | 2,0 | 4,0 | 1,0 | 1,0 | 6,5 |
| KWS Ahoi | 1,0 | 1,0 | 1,0 | - | 3,5 | 2,0 | 1,0 | - |
| Valhal | 1,0 | 1,0 | 1,0 | 2,0 | 2,0 | 1,0 | 1,0 | 2,0 |
| Ada* | 1,0 | 1,0 | 1,0 | 2,0 | 3,5 | 1,0 | 1,0 | 5,3 |
| Fredis* | 1,0 | 1,0 | 1,0 | 2,0 | 4,5 | 3,5 | 1,0 | 6,8 |
| KWS Emil* | 1,0 | 1,0 | 1,0 | 2,0 | 5,8 | 1,0 | 1,0 | 4,5 |
| Skagen* | 1,0 | 1,0 | 1,0 | 2,0 | 2,5 | 1,0 | 1,0 | 1,0 |

* standardsort / standard variety

TALIODER / WINTER BARLEY

Hordeum vulgare L.

Taliotra sortide tunnustamine 2022*

| Sort | Pind, ha | Sort | Pind, ha | Sort | Pind, ha |
|-------------|----------|------------|----------|-------|----------|
| KWS Wallace | 155,25 | Bordeaux | 80,84 | Anja | 47,03 |
| KWS Orbit | 147,21 | Jakubus | 66,00 | Mizzi | 34,39 |
| Frigg | 86,11 | KWS Kosmos | 49,42 | Yukon | 21,70 |

* Vastavalt PTA põldtunnustamise andmetele / according to AFB field inspection data

Katse agrotehnika / Agrotechnics of the trial 2021/2022

| VILJANDI | VÕRU | KUUSIKU |
|----------|------|---------|
|----------|------|---------|

Mullaliik / Soil

| | | |
|-------|----|----|
| LP(g) | LP | Kr |
|-------|----|----|

Eelvili / Previous crop

| | | |
|---------------------------------------|---------------------|-------------------------|
| valge mesikas / <i>Melilotus alba</i> | peakapsas / cabbage | mustkesa / black fallow |
|---------------------------------------|---------------------|-------------------------|

Külvikuupäev / Sowing date

| | | |
|------------|------------|------------|
| 14.09.2021 | 16.09.2021 | 10.09.2021 |
|------------|------------|------------|

Külvinorm / Sowing rate, 300 id.tera/m² / 300 germinating seeds per m²

Väetis (TA kg/ha); väetamise aeg / Fertilizer - level of N-P-K; Time of fertilization

| N | P | K | S | mikrod | N | P | K | S | mikrod | N | P | K | S | mikrod |
|-------------------------------|----|----|----|-------------------|------------|----|-----|----|--------|------------|----|----|----|-----------------|
| 08.09.2021 | | | | | 15.09.2021 | | | | | 08.09.2021 | | | | |
| 27 | 7 | 16 | 4 | B-0,03; Mg-1,5 | 32 | 35 | 100 | 8 | Mg-2 | 27 | 16 | 62 | 8 | B-0,06; Mg-4 |
| 18.04.2022 | | | | | 12.04.2022 | | | | | 20.04.2022 | | | | |
| 54 | | | 7 | Ca-12; Mg-1,4 | 40 | | | 20 | | 54 | | | 7 | |
| 29.04.2022 | | | | | 03.05.2022 | | | | | 23.05.2022 | | | | |
| 54 | | | 7 | Ca-12; Mg-1,4 | 30 | | | 17 | | 54 | | | 7 | |
| 03.05.2022 | | | | | 13.05.2022 | | | | | | | | | |
| PK-Max - 1,0 l/ha | | | | | 30 | | | 17 | | | | | | |
| 13.05.2022 | | | | | | | | | | | | | | |
| YaraVita Gramitrel - 2,0 l/ha | | | | | | | | | | | | | | |
| 25.05.2022 | | | | | | | | | | | | | | |
| 25 | 7 | 15 | 4 | B-0,03; Mg-1,4 | | | | | | | | | | |
| 30.05.2022 | | | | | | | | | | | | | | |
| Viva Gel KS 37-65 - 1,0 l/ha | | | | | | | | | | | | | | |
| 15.06.2022 | | | | | | | | | | | | | | |
| Delfan - 0,5 l/ha | | | | | | | | | | | | | | |
| 160 | 14 | 31 | 22 | Kokku | 132 | 35 | 100 | 62 | Kokku | 135 | 16 | 62 | 22 | Kokku |

Taimekaitse: (norm l/ha, tööt. kuupäev) / Plant protection (litre per hectare, date of the treatment)

| VILJANDI | VÕRU | KUUSIKU |
|--|---------------------|--------------------------|
| Puhtimine / Seed treatment - Vibrance Duo 2,0 l/t seemnete kohta / 2,0 l per 1 t seeds | | |
| 18.10.2021 | 05.05.2022 | 30.09.2021 |
| Komplet - 0,5 l/ha | Mustang - 0,6 l/ha | Input - 0,3 l/ha |
| Flight Forte - 2,0 l/ha | 01.06.2022 | Legacy 500 SC - 0,1 l/ha |
| 03.05.2022 | Curbatur - 0,4 l/ha | 20.05.2022 |
| Legacy 500 SC - 0,2 l/ha | Priaxor - 0,4 l/ha | Ariane S - 2,0 l/ha |
| Trimmer 50 SG - 22,5g/ha | | |
| 13.05.2022 | | |
| Balaya - 0,5 l/ha | | |
| Flexity - 0,25 l/ha | | |
| 30.05.2022 | | |
| Revytrex - 1,0 l/ha | | |
| 15.06.2022 | | |
| Variano Xpro - 0,5 l/ha | | |
| Input Triple - 0,5 l/ha | | |

Taliodra katseandmed

| Sort Variety | Arvestuslik saak, kg/ha Yield, kg/ha | | | | | |
|---------------------------|---|-----|-------|-----|---------|-----|
| | Viljandi | | Võru | | Kuusiku | |
| | kg/ha | % | kg/ha | % | kg/ha | % |
| Bordeaux (NOS 911.016-53) | 6526 | 103 | 10219 | 96 | 8765 | 111 |
| KWS Meridian* | 6736 | 100 | 10540 | 100 | 7410 | 100 |
| KWS Orbit* | 5957 | | 10703 | | 8365 | |
| PD5% (LSD) | 584 | | 446 | | 966 | |

Jätukatse / postregistration

| | | | | | | |
|---------------|------|-----|-------|-----|------|-----|
| KWS Wallace | 6225 | 98 | 10261 | 97 | 7611 | 96 |
| KWS Meridian* | 6736 | 100 | 10540 | 100 | 7410 | 100 |
| KWS Orbit* | 5957 | | 10703 | | 8365 | |
| PD5% (LSD) | 893 | | 548 | | 1182 | |

* standardsort / standard variety

| Sort Variety | Talvekindlus, Winter hardness, 1-9 p (1=halb/bad) | | | Kasvuaeg, päeva Growing period, days | | |
|---------------------------|---|------|---------|---|------|---------|
| | Viljandi | Võru | Kuusiku | Viljandi | Võru | Kuusiku |
| Bordeaux (NOS 911.016-53) | 9,0 | 9,0 | 6,3 | 308 | 303 | 312 |
| KWS Meridian* | 9,0 | 9,0 | 6,8 | 307 | 302 | 305 |
| KWS Orbit* | 9,0 | 9,0 | 7,0 | 300 | 303 | 305 |

Jätukutse / postregistration

| | | | | | | |
|---------------|-----|-----|-----|-----|-----|-----|
| KWS Wallace | 9,0 | 9,0 | 5,8 | 307 | 304 | 308 |
| KWS Meridian* | 9,0 | 9,0 | 6,8 | 307 | 302 | 305 |
| KWS Orbit* | 9,0 | 9,0 | 7,0 | 300 | 303 | 305 |

| Sort Variety | Proteiin k.a, % Protein d.m, % | | | Mahukaal, g/l Volume weight, g/l | | |
|---------------------------|-----------------------------------|------|---------|-------------------------------------|------|---------|
| | Viljandi | Võru | Kuusiku | Viljandi | Võru | Kuusiku |
| Bordeaux (NOS 911.016-53) | 12,1 | 11,1 | 12,1 | 671 | 669 | 671 |
| KWS Meridian* | 12,5 | 11,2 | 14,3 | 631 | 606 | 634 |
| KWS Orbit* | 12,6 | 11,2 | 13,9 | 599 | 636 | 636 |

Jätukutse / postregistration

| | | | | | | |
|---------------|------|------|------|-----|-----|-----|
| KWS Wallace | 12,5 | 11,3 | 12,7 | 628 | 637 | 652 |
| KWS Meridian* | 12,5 | 11,2 | 14,3 | 631 | 606 | 634 |
| KWS Orbit* | 12,6 | 11,2 | 13,9 | 599 | 636 | 636 |

| Sort Variety | 1000 tera mass, g 1000 kernel weight, g | | | Jääk sõelal 2,8 mm, % Sieving >2,8 mm sieve, % | | |
|---------------------------|--|------|---------|---|------|---------|
| | Viljandi | Võru | Kuusiku | Viljandi | Võru | Kuusiku |
| Bordeaux (NOS 911.016-53) | 47,7 | 50,5 | 51,1 | 65,2 | 86,4 | 82,2 |
| KWS Meridian* | 41,1 | 43,6 | 40,8 | 56,0 | 47,3 | 51,6 |
| KWS Orbit* | 43,3 | 46,2 | 43,8 | 39,0 | 61,4 | 44,7 |

Jätukutse / postregistration

| | | | | | | |
|---------------|------|------|------|------|------|------|
| KWS Wallace | 42,1 | 50,6 | 45,4 | 39,8 | 72,9 | 58,3 |
| KWS Meridian* | 41,1 | 43,6 | 40,8 | 56,0 | 47,3 | 51,6 |
| KWS Orbit* | 43,3 | 46,2 | 43,8 | 39,0 | 61,4 | 44,7 |

* standardsort / standard variety

| Sort Variety | Taimede kõrgus, cm Height of plants, cm | | | Lamandumine / Lodging, 1-9 p (1=ei lamandu/ not lodged) | | |
|---------------------------|--|------|---------|---|------|---------|
| | Viljandi | Võru | Kuusiku | Viljandi | Võru | Kuusiku |
| Bordeaux (NOS 911.016-53) | 70 | 90 | 81 | 1,0 | 1,0 | 1,0 |
| KWS Meridian* | 84 | 98 | 86 | 1,0 | 1,0 | 1,3 |
| KWS Orbit* | 81 | 99 | 82 | 1,0 | 1,0 | 1,0 |

Jätukutse / postregistration

| | | | | | | |
|---------------|----|----|----|-----|-----|-----|
| KWS Wallace | 78 | 98 | 79 | 1,0 | 1,0 | 1,0 |
| KWS Meridian* | 84 | 98 | 86 | 1,0 | 1,0 | 1,3 |
| KWS Orbit* | 81 | 99 | 82 | 1,0 | 1,0 | 1,0 |

| Sort Variety | Ohete eemaldumine, 1-3 p (1=kergesti, 3=raskesti) Removal of awns, 1-3 p (1=slightly, 3=hardly) | | |
|---------------------------|---|------|---------|
| | Viljandi | Võru | Kuusiku |
| Bordeaux (NOS 911.016-53) | 1 | 3 | 3 |
| KWS Meridian* | 1 | 3 | 3 |
| KWS Orbit* | 2 | 3 | 3 |

Jätukutse / postregistration

| | | | |
|---------------|---|---|---|
| KWS Wallace | 1 | 3 | 3 |
| KWS Meridian* | 1 | 3 | 3 |
| KWS Orbit* | 2 | 3 | 3 |

Haigused / Diseases, 1-9 p (1=nakkus puudub/not infected)

| Sort Variety | Lumiseen <i>Microdochium nivale</i> | | | Kõrreliste jahukaste <i>Blumeria graminis</i> | | |
|---------------------------|--|------|---------|--|------|---------|
| | Viljandi | Võru | Kuusiku | Viljandi | Võru | Kuusiku |
| Bordeaux (NOS 911.016-53) | 1,0 | 1,0 | 1,0 | 3,0 | 1,0 | 3,0 |
| KWS Meridian* | 1,0 | 1,0 | 1,0 | 2,3 | 1,0 | 2,3 |
| KWS Orbit* | 1,0 | 1,0 | 1,0 | 2,0 | 1,0 | 2,0 |

Jätukutse / postregistration

| | | | | | | |
|---------------|-----|-----|-----|-----|-----|-----|
| KWS Wallace | 1,0 | 1,0 | 1,0 | 2,5 | 2,0 | 2,3 |
| KWS Meridian* | 1,0 | 1,0 | 1,0 | 2,3 | 1,0 | 2,3 |
| KWS Orbit* | 1,0 | 1,0 | 1,0 | 2,0 | 1,0 | 2,0 |

* standardsort / standard variety

| Sort Variety | Kõrreliste pruunlaikusus <i>Cochliobolus sativus</i> | | | Äärislaikusus <i>Rynchosporium secalis</i> | | |
|---------------------------|---|------|---------|---|------|---------|
| | Viljandi | Võru | Kuusiku | Viljandi | Võru | Kuusiku |
| Bordeaux (NOS 911.016-53) | 3,3 | 2,5 | 2,5 | 1,3 | 1,5 | 1,5 |
| KWS Meridian* | 2,8 | 3,0 | 3,3 | 1,8 | 1,0 | 1,0 |
| KWS Orbit* | 3,0 | 3,0 | 3,8 | 2,8 | 2,5 | 2,0 |

Jätukatse / postregistration

| | | | | | | |
|---------------|-----|-----|-----|-----|-----|-----|
| KWS Wallace | 3,3 | 2,5 | 2,8 | 1,0 | 2,0 | 2,0 |
| KWS Meridian* | 2,8 | 3,0 | 3,3 | 1,8 | 1,0 | 1,0 |
| KWS Orbit* | 3,0 | 3,0 | 3,8 | 2,8 | 2,5 | 2,0 |

| Sort Variety | Odra-võrklaikusus <i>Pyrenophora teres f. Teres</i> 1-9 palli/points | | | Lendnõgi odral <i>Ustilago nuda f.sp. Hordei</i> taimi/plants | | |
|---------------------------|--|------|---------|---|------|---------|
| | Viljandi | Võru | Kuusiku | Viljandi | Võru | Kuusiku |
| Bordeaux (NOS 911.016-53) | 1,8 | 1,5 | 2,5 | 0 | 0 | 0 |
| KWS Meridian* | 1,8 | 1,5 | 2,0 | 0 | 0 | 0 |
| KWS Orbit* | 1,5 | 3,0 | 2,3 | 0 | 0 | 0 |

Jätukatse / postregistration

| | | | | | | |
|---------------|-----|-----|-----|---|---|---|
| KWS Wallace | 1,0 | 2,0 | 1,5 | 0 | 0 | 0 |
| KWS Meridian* | 1,8 | 1,5 | 2,0 | 0 | 0 | 0 |
| KWS Orbit* | 1,5 | 3,0 | 2,3 | 0 | 0 | 0 |

* standardsort / standard variety

TALITRITIKALE / WINTER TRITICALE

Triticosecale W.

Talitritikale sortide tunnustamine 2022*

| Sort | Pind, ha | Sort | Pind, ha | Sort | Pind, ha |
|--------|----------|--------|----------|------|----------|
| Rivolt | 49,52 | Temuco | 39,69 | Ruja | 20,49 |

* Vastavalt PTA põldtunnustamise andmetele / according to AFB field inspection data

Katse agrotehnika / Agrotechnics of the trial 2021/2022

| VILJANDI | VÕRU | KUUSIKU |
|----------|------|---------|
|----------|------|---------|

Mullaliik / Soil

| | | |
|-------|----|----|
| LP(g) | LP | Kr |
|-------|----|----|

Eelvili / Previous crop

| | | |
|---------------------------------------|---------------------|-------------------------|
| valge mesikas / <i>Melilotus alba</i> | peakapsas / cabbage | mustkesa / black fallow |
|---------------------------------------|---------------------|-------------------------|

Külvikuupäev / Sowing date

| | | |
|------------|------------|------------|
| 14.09.2021 | 16.09.2021 | 10.09.2021 |
|------------|------------|------------|

Külvinorm / Sowing rate, 300 id.tera/m² / 300 germinating seeds per m²

Väetis (TA kg/ha); väetamise aeg / Fertilizer - level of N-P-K; Time of fertilization

| N | P | K | S | mikrod | N | P | K | S | mikrod | N | P | K | S | mikrod |
|-------------------------------|----|----|----|-------------------|------------|----|-----|----|--------|------------|----|----|----|-----------------|
| 08.09.2021 | | | | | 15.09.2021 | | | | | 08.09.2021 | | | | |
| 27 | 7 | 16 | 4 | B-0,03; Mg-1,5 | 32 | 35 | 100 | 8 | Mg-2 | 23 | 13 | 52 | 7 | B-0,05; Mg-3 |
| 18.04.2022 | | | | | 12.04.2022 | | | | | 20.04.2022 | | | | |
| 54 | | | 7 | Ca-12; Mg-1,4 | 40 | | | 20 | | 54 | | | 8 | |
| 29.04.2022 | | | | | 03.05.2022 | | | | | 23.05.2022 | | | | |
| 54 | | | 7 | Ca-12; Mg-1,4 | 30 | | | 17 | | 54 | | | 8 | |
| 03.05.2022 | | | | | 13.05.2022 | | | | | 07.06.2022 | | | | |
| PK-Max - 1,0 l/ha | | | | | 30 | | | 17 | | 26 | | | 13 | |
| 13.05.2022 | | | | | | | | | | | | | | |
| YaraVita Gramitrel - 2,0 l/ha | | | | | | | | | | | | | | |
| 25.05.2022 | | | | | | | | | | | | | | |
| 25 | 7 | 15 | 4 | B-0,03; Mg-1,4 | | | | | | | | | | |
| 30.05.2022 | | | | | | | | | | | | | | |
| Viva Gel KS 37-65 - 1,0 l/ha | | | | | | | | | | | | | | |
| 15.06.2022 | | | | | | | | | | | | | | |
| Delfan - 0,5 l/ha | | | | | | | | | | | | | | |
| 160 | 14 | 31 | 22 | Kokku | | | | | | | | | | |

Taimekaitse: (norm l/ha, töötl. kuupäev) / Plant protection (litre per hectare, date of the treatment)

| VILJANDI | VÕRU | KUUSIKU |
|--|---------------------|--------------------------|
| Puhtimine / Seed treatment - Vibrance Duo 2,0 l/t seemnete kohta / 2,0 l per 1 t seeds | | |
| 18.10.2021 | 05.05.2022 | 30.09.2021 |
| Komplet - 0,5 l/ha | Mustang - 0,6 l/ha | Input Triple - 0,3 l/ha |
| Flight Forte - 2,0 l/ha | 01.06.2022 | Legacy 500 SC - 0,1 l/ha |
| 03.05.2022 | Curbatur - 0,4 l/ha | 20.05.2022 |
| Legacy 500 SC - 0,2 l/ha | Priaxor - 0,4 l/ha | Ariane S - 2,0 l/ha |
| Trimmer 50 SG - 22,5g/ha | | Input Triple - 1,0 l/ha |
| 13.05.2022 | | |
| Balaya - 0,5 l/ha | | |
| Flexity - 0,25 l/ha | | |
| 30.05.2022 | | |
| Revytrex - 1,0 l/ha | | |
| 15.06.2022 | | |
| Variano Xpro - 0,5 l/ha | | |
| Input Triple - 0,5 l/ha | | |

Talitrustikale katseandmed

| Sort Variety | Arvestuslik saak / Yield, kg/ha | | | | | |
|---------------------|---------------------------------|-----|-------|-----|---------|-----|
| | Viljandi | | Võru | | Kuusiku | |
| | kg/ha | % | kg/ha | % | kg/ha | % |
| 11SWE073-7 (Lumaco) | 7851 | 103 | 11765 | 127 | 10460 | 107 |
| 12SWE257b (Saranto) | 8251 | 109 | 11030 | 119 | 10712 | 110 |
| BOH 4121 | 9220 | 121 | 10605 | 114 | 11054 | 113 |
| STRG 3024'20 | 8366 | 110 | 11749 | 127 | 11825 | 121 |
| Ruja* | 6066 | 100 | 8359 | 100 | 9032 | 100 |
| Temuco* | 9129 | | 10182 | | 10451 | |
| PD5% (LSD) | 588 | | 438 | | 903 | |

| Sort Variety | Talvekindlus, Winter hardiness, 1-9 p (1=halb/bad) | | | Kasvuaeg, päeva Growing period, days | | |
|---------------------|--|------|---------|---|------|---------|
| | Viljandi | Võru | Kuusiku | Viljandi | Võru | Kuusiku |
| 11SWE073-7 (Lumaco) | 9,0 | 9,0 | 7,8 | 306 | 315 | 319 |
| 12SWE257b (Saranto) | 9,0 | 9,0 | 9,0 | 306 | 314 | 319 |
| BOH 4121 | 9,0 | 9,0 | 9,0 | 306 | 314 | 320 |
| STRG 3024'20 | 9,0 | 9,0 | 8,3 | 307 | 315 | 321 |
| Ruja* | 9,0 | 9,0 | 8,3 | 310 | 320 | 325 |
| Temuco* | 9,0 | 9,0 | 8,3 | 307 | 317 | 319 |

* standardsort / standard variety

| Sort Variety | 1000 tera mass, g 1000 kernel weight, g | | | Mahukaal, g/l Volume weight, g/l | | |
|---------------------|--|------|---------|-------------------------------------|------|---------|
| | Viljandi | Võru | Kuusiku | Viljandi | Võru | Kuusiku |
| 11SWE073-7 (Lumaco) | 33 | 35 | 37 | 718 | 701 | 754 |
| 12SWE257b (Saranto) | 34 | 32 | 32 | 714 | 699 | 748 |
| BOH 4121 | 36 | 35 | 40 | 734 | 713 | 758 |
| STRG 3024'20 | 34 | 38 | 38 | 734 | 750 | 781 |
| Ruja* | 36 | 40 | 43 | 676 | 695 | 746 |
| Temuco* | 31 | 33 | 33 | 667 | 638 | 691 |

| Sort Variety | Langemisarv, sek Falling number, sec | | | Proteiin kuivaines, % Protein d.m, % | | |
|---------------------|---|------|---------|---|------|---------|
| | Viljandi | Võru | Kuusiku | Viljandi | Võru | Kuusiku |
| 11SWE073-7 (Lumaco) | 122 | 99 | 76 | 14,3 | 12,1 | 13,4 |
| 12SWE257b (Saranto) | 104 | 188 | 116 | 13,6 | 11,7 | 13,4 |
| BOH 4121 | 123 | 169 | 118 | 14,0 | 12,6 | 13,5 |
| STRG 3024'20 | 142 | 185 | 74 | 13,9 | 12,0 | 12,8 |
| Ruja* | 85 | 80 | 88 | 14,9 | 13,6 | 13,8 |
| Temuco* | 149 | 92 | 112 | 12,7 | 11,6 | 12,4 |

| Sort Variety | Taimede kõrgus, cm Height of plants, cm | | | Lamandumine / Lodging, 1-9p (1=ei lamandu/ not lodged) | | |
|---------------------|--|------|---------|--|------|---------|
| | Viljandi | Võru | Kuusiku | Viljandi | Võru | Kuusiku |
| 11SWE073-7 (Lumaco) | 104 | 114 | 104 | 1,0 | 1,0 | 1,0 |
| 12SWE257b (Saranto) | 82 | 93 | 80 | 1,0 | 1,0 | 1,0 |
| BOH 4121 | 102 | 105 | 104 | 1,0 | 1,0 | 1,0 |
| STRG 3024'20 | 107 | 116 | 112 | 1,0 | 1,0 | 1,0 |
| Ruja* | 89 | 106 | 108 | 1,0 | 1,0 | 1,5 |
| Temuco* | 89 | 98 | 95 | 1,0 | 1,0 | 1,0 |

* standardsort / standard variety

Haigusid / Diseases, 1-9 p (1=nakkus puudub/not infected)

| Sort Variety | Lumiseen <i>Microdochium nivale</i> | | | Kõrreliste jahukaste <i>Blumeria graminis</i> | | | Kõrreliste helelaiksus <i>Septoria spp</i> | | |
|---------------------|--|------|---------|---|------|---------|--|------|---------|
| | Viljandi | Võru | Kuusiku | Viljandi | Võru | Kuusiku | Viljandi | Võru | Kuusiku |
| 11SWE073-7 (Lumaco) | 1,0 | 1,0 | 1,0 | 2,5 | 1,0 | 1,0 | 2,3 | 1,0 | 1,8 |
| 12SWE257b (Saranto) | 1,0 | 1,0 | 1,0 | 3,3 | 1,0 | 1,0 | 2,8 | 3,0 | 2,5 |
| BOH 4121 | 1,0 | 1,0 | 1,0 | 3,3 | 1,0 | 1,0 | 3,0 | 3,0 | 1,0 |
| STRG 3024'20 | 1,0 | 1,0 | 1,0 | 2,0 | 1,0 | 1,0 | 2,3 | 1,5 | 4,0 |
| Ruja* | 1,0 | 1,0 | 1,0 | 3,3 | 1,0 | 1,0 | 3,8 | 3,0 | 1,0 |
| Temuco* | 1,0 | 1,0 | 1,0 | 3,3 | 1,0 | 1,0 | 2,8 | 3,0 | 2,3 |

| Sort Variety | Nisu kollane rooste <i>Puccinia striiformis</i> | | | Punakaste (fusarioos) <i>Fusarium spp</i> | | |
|---------------------|--|------|---------|---|------|---------|
| | Viljandi | Võru | Kuusiku | Viljandi | Võru | Kuusiku |
| 11SWE073-7 (Lumaco) | 1,0 | 1,0 | 1,0 | 1,0 | 1,0 | 1,0 |
| 12SWE257b (Saranto) | 1,0 | 1,0 | 1,0 | 1,0 | 1,0 | 1,0 |
| BOH 4121 | 1,0 | 1,0 | 1,0 | 1,0 | 1,0 | 1,0 |
| STRG 3024'20 | 1,0 | 1,0 | 1,0 | 1,0 | 1,0 | 1,0 |
| Ruja* | 1,0 | 1,0 | 1,0 | 1,0 | 1,0 | 1,0 |
| Temuco* | 1,0 | 1,0 | 1,0 | 1,0 | 1,0 | 1,0 |

* standardsort / standard variety

SUVINISU / SPRING WHEAT

Triticum aestivum L.

Suvinisu sortide tunnustamine 2022*

| Sort | Pind, ha | Sort | Pind, ha | Sort | Pind, ha |
|----------|----------|-------------|----------|--------------|----------|
| Licamero | 160,93 | KWS Mistral | 60,67 | KWS Scirocco | 21,39 |
| Quarna | 145,63 | Happy | 59,01 | Manu | 16,66 |
| Mooni | 139,27 | Kapitol | 41,40 | WPB Troy | 15,20 |
| Calixo | 97,28 | Mireete | 40,59 | Levels | 13,04 |
| Hiie | 95,48 | KWS Sharki | 40,15 | Broca | 12,00 |
| Cornetto | 68,76 | Anabel | 30,47 | Spécifik | 11,76 |

* Vastavalt PTA põldtunnustamise andmetele / according to AFB field inspection data

Katse agrotehnika / Agrotechnics of the trial 2022

| VILJANDI | VÖRU | KUUSIKU | JÕGEVA |
|----------|------|---------|--------|
|----------|------|---------|--------|

Mullaliik / Soil

| | | | |
|-------|----|----|----|
| LP(g) | LP | Kr | KI |
|-------|----|----|----|

Eelvili / Previous crop

| | | | |
|----------------------------|------------------------|-----------------------------------|-------------------------------|
| suvivikk / common vetch | peakapsas / cabbage | taliraps / winter oilseed rape | punane ristik / red clover |
|----------------------------|------------------------|-----------------------------------|-------------------------------|

Külvikuupäev / Sowing date

| | | | |
|------------|------------|------------|------------|
| 03.05.2022 | 05.05.2022 | 05.05.2022 | 29.04.2022 |
|------------|------------|------------|------------|

Külvinorm / Sowing rate: 550 id.tera/m² / germinating seeds per m²

Väetis (TA kg/ha); väetamise aeg / Fertilizer - level of N-P-K; Time of fertilization

| N | P | K | S | mikrod | N | P | K | S | mikrod | N | P | K | S | mikrod | N | P | K | S | mikrod |
|----------------------|----|----|----|-----------------|------------|----|----|----|-----------------|------------|----|----|----|--------|------------|----|----|----|-------------------|
| 29.04.2022 | | | | | 04.05.2022 | | | | | 02.05.2022 | | | | | 25.04.2022 | | | | |
| 72 | 19 | 43 | 10 | B-0,08; Mg-4 | 72 | 19 | 43 | 10 | B-0,08; Mg-4 | 56 | 24 | 70 | 10 | B-0,08 | 60 | 16 | 36 | 9 | B-0,07; Mg-3,3 |
| 01.06.2022 | | | | | 07.06.2022 | | | | | 23.05.2022 | | | | | 13.06.2022 | | | | |
| 41 | | | 6 | | 26 | | | 13 | | 54 | | | 8 | | 60 | | | 9 | |
| 20.06.2022 | | | | | 17.06.2022 | | | | | 07.06.2022 | | | | | | | | | |
| 30 | | | 8 | Ca-8; Mg-0,6 | 26 | | | 13 | | 52 | | | 26 | | | | | | |
| 01.06.2022 | | | | | | | | | | | | | | | | | | | |
| Gramitrel - 1,5 l/ha | | | | | | | | | | | | | | | | | | | |
| 15. ja 20.06.2022 | | | | | | | | | | | | | | | | | | | |
| Delfan - 0,5 l/ha | | | | | | | | | | | | | | | | | | | |
| 143 | 19 | 43 | 24 | Kokku | 124 | 19 | 43 | 36 | Kokku | 162 | 24 | 70 | 44 | Kokku | 120 | 16 | 36 | 18 | Kokku |

Taimekaitse: (norm l/ha, töötl. kuupäev) / Plant protection (litre per hectare, date of the treatment)

| VILJANDI | VÕRU | KUUSIKU | JÕGEVA |
|--|-------------------------|---------------------|------------------------|
| Puhtimine / Seed treatment - Vibrance Pro 2,0 l/t seemnete kohta / 2,0 l per 1 t seeds | | | |
| 01.06.2022 | 01.06.2022 | 30.05.2022 | 01.06.2022 |
| Ariane S - 2,5 l/ha | Trimmer 50 SG – 15 g/ha | Ariane S - 2,0 l/ha | Granstar Preemia 50 |
| Balaya - 0,4 l/ha | | Input - 1,0 l/ha | SX - 20 g/ha |
| Flexity - 0,25 l/ha | MCPA - 1,5 l/ha | | Primus - 80 ml/ha |
| 15.06.2022 | 22.06.2022 | | 20.06.2022 |
| 2,4 D Nufarm - 1,25 l/ha | Curbatur - 0,4 l/ha | | Priaxor - 0,8 l/ha |
| | Priaxor - 0,4 l/ha | | 01.07.2022 |
| 20.06.2022 | | | Ascra Xpro - 0,75 l/ha |
| Revytrex - 1,0 l/ha | | | Decis Mega - 0,15 l/ha |
| 21.06.2022 | | | |
| Axial 50 EC - 0,8 l/ha | | | |

Suvinisu katseandmed

| Sort Variety | Arvestuslik saak, kg/ha Yield, kg/ha | | | | | | | |
|---------------------------|---|-----|-------|-----|---------|-----|--------|-----|
| | Viljandi | | Võru | | Kuusiku | | Jõgeva | |
| | kg/ha | % | kg/ha | % | kg/ha | % | kg/ha | % |
| ADD 294.10481 | 4590 | 106 | 9007 | 105 | 3481 | 96 | 8232 | 102 |
| ADD.294.11172 | 4306 | 99 | 8993 | 104 | 2637 | 73 | 8119 | 100 |
| KW 363-3-18 (KWs Barolum) | 4527 | 104 | 8933 | 104 | 4829 | 134 | 8340 | 103 |
| NOS 412013.06 (Nimrod) | 5153 | 119 | 8983 | 104 | 4635 | 128 | 8410 | 104 |
| NOS 414012.04 | 3831 | 88 | 8713 | 101 | 4780 | 132 | 9171 | 113 |
| NOS 414018.07 | 4751 | 109 | 8070 | 94 | 3527 | 98 | 7655 | 94 |
| SJ 18SW028 (Linnea) | 4844 | 112 | 9197 | 107 | 6771 | 187 | 9605 | 119 |
| SJ 18SW111 (Selina) | 4605 | 106 | 9443 | 110 | 4685 | 130 | 8876 | 110 |
| SW 160105 | 4415 | 102 | 8776 | 102 | 4215 | 117 | 8210 | 101 |
| SW 170130 | 2887 | 66 | 6967 | 81 | 5658 | 156 | 6650 | 82 |
| SW 180133 | 3459 | 80 | 8330 | 97 | 4435 | 123 | 8192 | 101 |
| SW 180140 | 3707 | 85 | 8252 | 96 | 5007 | 138 | 8033 | 99 |
| TRI 1547.08 | 5203 | 120 | 9240 | 107 | 4679 | 129 | 8616 | 106 |
| WPB 15SW690-03 | 3740 | 86 | 9252 | 107 | 3954 | 109 | 8967 | 111 |
| Happy* | 3723 | 100 | 8158 | 100 | 3687 | 100 | 8189 | 100 |
| Hiie* | 4844 | | 8044 | | 3810 | | 6951 | |
| KWS Mistral* | 4315 | | 9106 | | 3858 | | 9188 | |
| Licamero* | 4494 | | 9134 | | 3112 | | 8081 | |
| PD5% (LSD) | 1066 | | 546 | | 334 | | 537 | |

Jätukutse / postregistration

| | | | | | | | | |
|--------------|------|-----|------|-----|------|-----|------|-----|
| Broca | 4431 | 102 | 8531 | 99 | 4352 | 120 | 8719 | 108 |
| Calixo | 3975 | 92 | 8596 | 100 | 3740 | 103 | 8284 | 102 |
| Cornetto | 4570 | 105 | 9380 | 109 | 5436 | 150 | 8541 | 105 |
| KWS Carusum | 4530 | 104 | 8870 | 103 | 4547 | 126 | 8967 | 111 |
| KWS Pensum | 3570 | 82 | 8401 | 98 | 3827 | 106 | 8138 | 100 |
| Happy* | 3723 | 100 | 8158 | 100 | 3687 | 100 | 8189 | 100 |
| Hiie* | 4844 | | 8044 | | 3810 | | 6951 | |
| KWS Mistral* | 4315 | | 9106 | | 3858 | | 9188 | |
| Licamero* | 4494 | | 9134 | | 3112 | | 8081 | |
| PD5% (LSD) | 994 | | 581 | | 346 | | 431 | |

* standardsort / standard variety

| Sort Variety | Proteiin kuivaines, % Protein d.m, % | | | | Kasvuaeg, päeva Growing period, days | | | |
|---------------------------|---|------|---------|--------|---|------|---------|--------|
| | Viljandi | Võru | Kuusiku | Jõgeva | Viljandi | Võru | Kuusiku | Jõgeva |
| ADD 294.10481 | 17,7 | 14,4 | 19,8 | 14,8 | 99 | 102 | 92 | 107 |
| ADD.294.11172 | 16,3 | 13,4 | 19,5 | 14,5 | 94 | 100 | 92 | 102 |
| KW 363-3-18 (KWs Barolum) | 17,3 | 13,9 | 19,0 | 14,7 | 97 | 100 | 92 | 107 |
| NOS 412013.06 (Nimrod) | 17,3 | 13,7 | 18,3 | 14,3 | 95 | 99 | 91 | 102 |
| NOS 414012.04 | 18,3 | 13,3 | 18,8 | 14,1 | 97 | 102 | 91 | 106 |
| NOS 414018.07 | 16,9 | 13,2 | 20,0 | 13,9 | 99 | 105 | 94 | 108 |
| SJ 18SW028 (Linnea) | 16,5 | 13,9 | 19,0 | 14,7 | 94 | 98 | 91 | 103 |
| SJ 18SW111 (Selina) | 15,6 | 12,9 | 18,3 | 13,6 | 95 | 100 | 92 | 105 |
| SW 160105 | 18,4 | 14,3 | 18,3 | 14,6 | 94 | 100 | 92 | 103 |
| SW 170130 | 20,3 | 16,6 | 17,0 | 16,7 | 94 | 100 | 92 | 106 |
| SW 180133 | 17,1 | 13,9 | 19,0 | 13,9 | 99 | 104 | 92 | 107 |
| SW 180140 | 18,3 | 14,2 | 19,4 | 14,8 | 99 | 107 | 95 | 109 |
| TRI 1547.08 | 15,8 | 14,0 | 18,0 | 14,2 | 99 | 103 | 91 | 106 |
| WPB 15SW690-03 | 17,2 | 13,2 | 18,4 | 13,9 | 99 | 106 | 91 | 109 |
| Happy* | 16,9 | 13,5 | 19,3 | 13,9 | 99 | 103 | 93 | 107 |
| Hiie* | 15,1 | 14,3 | 18,1 | 14,8 | 94 | 94 | 91 | 101 |
| KWS Mistral* | 17,0 | 13,6 | 18,3 | 14,5 | 94 | 99 | 91 | 106 |
| Licamero* | 17,3 | 13,9 | 19,1 | 14,7 | 94 | 99 | 91 | 101 |

Jätukutse / postregistration

| | | | | | | | | |
|--------------|------|------|------|------|----|-----|----|-----|
| Broca | 16,7 | 13,5 | 19,6 | 13,9 | 99 | 103 | 95 | 107 |
| Calixo | 17,2 | 13,9 | 19,0 | 14,5 | 94 | 100 | 91 | 103 |
| Cornetto | 16,0 | 13,2 | 17,2 | 13,8 | 94 | 102 | 92 | 106 |
| KWS Carusum | 17,1 | 14,3 | 19,0 | 15,1 | 99 | 101 | 92 | 106 |
| KWS Pensum | 18,2 | 13,9 | 18,5 | 15,0 | 94 | 103 | 92 | 107 |
| Happy* | 16,9 | 13,5 | 19,3 | 13,9 | 99 | 103 | 93 | 107 |
| Hiie* | 15,1 | 14,3 | 18,1 | 14,8 | 94 | 94 | 91 | 101 |
| KWS Mistral* | 17,0 | 13,6 | 18,3 | 14,5 | 94 | 99 | 91 | 106 |
| Licamero* | 17,3 | 13,9 | 19,1 | 14,7 | 94 | 99 | 91 | 101 |

* standardsort / standard variety

| Sort Variety | Langemisarv, sek Falling number, sec | | | | Kleepvalk, % Glue protein, % | | | |
|---------------------------|---|------|---------|--------|---------------------------------|------|---------|--------|
| | Viljandi | Võru | Kuusiku | Jõgeva | Viljandi | Võru | Kuusiku | Jõgeva |
| ADD 294.10481 | 248 | 317 | 81 | 320 | 39,1 | 33,3 | 47,5 | 34,5 |
| ADD.294.11172 | 130 | 231 | 93 | 283 | 37,9 | 27,3 | 48,1 | 33,5 |
| KW 363-3-18 (KWs Barolum) | 236 | 330 | 81 | 276 | 40,2 | 31,8 | 42,8 | 35,2 |
| NOS 412013.06 (Nimrod) | 135 | 269 | 158 | 338 | 40,9 | 30,6 | 43,8 | 33,5 |
| NOS 414012.04 | 211 | 299 | 195 | 343 | 44,2 | 28,8 | 45,9 | 32,6 |
| NOS 414018.07 | 211 | 311 | 85 | 331 | 36,7 | 27,3 | 45,7 | 34,6 |
| SJ 18SW028 (Linnea) | 178 | 263 | 69 | 321 | 36,0 | 30,4 | 40,5 | 34,7 |
| SJ 18SW111 (Selina) | 251 | 333 | 156 | 331 | 34,8 | 28,9 | 40,0 | 31,0 |
| SW 160105 | 285 | 281 | 116 | 340 | 48,9 | 36,1 | 43,2 | 36,4 |
| SW 170130 | 274 | 359 | 313 | 367 | 55,6 | 44,4 | 41,5 | 44,4 |
| SW 180133 | 289 | 353 | 195 | 337 | 41,8 | 32,4 | 46,4 | 35,7 |
| SW 180140 | 253 | 352 | 204 | 348 | 46,4 | 30,4 | 45,8 | 34,6 |
| TRI 1547.08 | 200 | 325 | 152 | 298 | 35,1 | 31,2 | 40,7 | 34,7 |
| WPB 15SW690-03 | 165 | 347 | 154 | 338 | 38,4 | 26,9 | 44,4 | 30,3 |
| Happy* | 220 | 351 | 103 | 365 | 39,1 | 29,2 | 47,0 | 30,6 |
| Hiie* | 251 | 331 | 183 | 304 | 33,7 | 29,9 | 41,8 | 34,0 |
| KWS Mistral* | 173 | 276 | 106 | 290 | 39,1 | 31,0 | 41,7 | 34,0 |
| Licamero* | 167 | 269 | 127 | 319 | 40,7 | 32,1 | 44,5 | 35,1 |

Jätukukitse / postregistration

| | | | | | | | | |
|--------------|-----|-----|-----|-----|------|------|------|------|
| Broca | 244 | 355 | 217 | 344 | 40,9 | 29,0 | 48,3 | 32,7 |
| Calixo | 130 | 383 | 172 | 303 | 39,3 | 31,7 | 45,7 | 34,3 |
| Cornetto | 291 | 366 | 301 | 348 | 34,1 | 29,0 | 42,7 | 30,9 |
| KWS Carusum | 224 | 322 | 134 | 340 | 40,5 | 32,8 | 43,7 | 38,3 |
| KWS Pensum | 188 | 366 | 114 | 332 | 43,6 | 31,4 | 42,4 | 32,5 |
| Happy* | 220 | 351 | 103 | 365 | 39,1 | 29,2 | 47,0 | 30,6 |
| Hiie* | 251 | 331 | 183 | 304 | 33,7 | 29,9 | 41,8 | 34,0 |
| KWS Mistral* | 173 | 276 | 106 | 290 | 39,1 | 31,0 | 41,7 | 34,0 |
| Licamero* | 167 | 269 | 127 | 319 | 40,7 | 32,1 | 44,5 | 35,1 |

* standardsort / standard variety

| Sort Variety | Mahukaal, g/l Volume weight, g/l | | | | 1000 tera mass, g 1000 kernel weight, g | | | |
|---------------------------|-------------------------------------|------|---------|--------|--|------|---------|--------|
| | Viljandi | Võru | Kuusiku | Jõgeva | Viljandi | Võru | Kuusiku | Jõgeva |
| ADD 294.10481 | 823 | 787 | 756 | 817 | 31,5 | 34,5 | 30,2 | 36,2 |
| ADD.294.11172 | 814 | 804 | 735 | 824 | 34,3 | 35,7 | 34,4 | 37,0 |
| KW 363-3-18 (KWs Barolum) | 822 | 797 | 790 | 804 | 37,5 | 35,6 | 35,1 | 37,6 |
| NOS 412013.06 (Nimrod) | 800 | 765 | 750 | 789 | 37,9 | 34,0 | 34,5 | 37,2 |
| NOS 414012.04 | 800 | 782 | 779 | 792 | 38,2 | 34,6 | 36,2 | 39,4 |
| NOS 414018.07 | 827 | 783 | 752 | 779 | 34,6 | 33,7 | 30,4 | 33,2 |
| SJ 18SW028 (Linnea) | 796 | 791 | 758 | 827 | 32,9 | 38,3 | 29,7 | 41,9 |
| SJ 18SW111 (Selina) | 819 | 820 | 785 | 826 | 32,1 | 39,2 | 32,2 | 40,7 |
| SW 160105 | 784 | 767 | 765 | 812 | 37,1 | 35,8 | 35,0 | 38,1 |
| SW 170130 | 793 | 794 | 806 | 813 | 34,7 | 34,5 | 41,8 | 35,6 |
| SW 180133 | 804 | 778 | 763 | 807 | 39,1 | 35,9 | 34,2 | 39,0 |
| SW 180140 | 783 | 790 | 721 | 799 | 36,1 | 37,1 | 32,1 | 37,3 |
| TRI 1547.08 | 825 | 795 | 784 | 807 | 36,8 | 37,8 | 35,7 | 43,3 |
| WPB 15SW690-03 | 764 | 758 | 738 | 779 | 38,2 | 37,5 | 33,4 | 40,2 |
| Happy* | 796 | 789 | 741 | 804 | 42,0 | 33,8 | 33,3 | 36,5 |
| Hiie* | 815 | 774 | 771 | 804 | 35,3 | 33,9 | 35,8 | 36,5 |
| KWS Mistral* | 824 | 818 | 802 | 834 | 36,1 | 37,2 | 34,8 | 40,5 |
| Licamero* | 801 | 796 | 759 | 802 | 36,7 | 38,1 | 32,5 | 37,8 |

Jätukutse / postregistration

| | | | | | | | | |
|--------------|-----|-----|-----|-----|------|------|------|------|
| Broca | 776 | 742 | 728 | 793 | 36,1 | 35,5 | 33,8 | 39,1 |
| Calixo | 795 | 760 | 747 | 795 | 35,4 | 34,7 | 34,1 | 37,6 |
| Cornetto | 806 | 791 | 798 | 790 | 36,1 | 38,0 | 41,4 | 38,0 |
| KWS Carusum | 828 | 819 | 787 | 828 | 35,2 | 37,1 | 35,0 | 41,3 |
| KWS Pensum | 782 | 790 | 749 | 799 | 40,6 | 37,3 | 34,1 | 38,0 |
| Happy* | 796 | 789 | 741 | 804 | 42,0 | 33,8 | 33,3 | 36,5 |
| Hiie* | 815 | 774 | 771 | 804 | 35,3 | 33,9 | 35,8 | 36,5 |
| KWS Mistral* | 824 | 818 | 802 | 834 | 36,1 | 37,2 | 34,8 | 40,5 |
| Licamero* | 801 | 796 | 759 | 802 | 36,7 | 38,1 | 32,5 | 37,8 |

* standardsort / standard variety

| Sort Variety | Gluteenindeks, % Gluten index, % | | | | Zeleny arv, ml Zeleny value, ml | | | |
|---------------------------|-------------------------------------|------|---------|--------|------------------------------------|------|---------|--------|
| | Viljandi | Võru | Kuusiku | Jõgeva | Viljandi | Võru | Kuusiku | Jõgeva |
| ADD 294.10481 | 64 | 43 | 46 | 56 | 59 | 48 | 60 | 52 |
| ADD.294.11172 | 71 | 89 | 43 | 78 | 55 | 41 | 59 | 49 |
| KW 363-3-18 (KWs Barolum) | 62 | 58 | 71 | 80 | 53 | 47 | 59 | 48 |
| NOS 412013.06 (Nimrod) | 69 | 63 | 58 | 75 | 57 | 45 | 60 | 49 |
| NOS 414012.04 | 62 | 79 | 57 | 85 | 60 | 41 | 59 | 49 |
| NOS 414018.07 | 80 | 96 | 50 | 59 | 60 | 39 | 60 | 48 |
| SJ 18SW028 (Linnea) | 84 | 62 | 68 | 77 | 59 | 44 | 59 | 52 |
| SJ 18SW111 (Selina) | 66 | 45 | 63 | 62 | 53 | 33 | 60 | 44 |
| SW 160105 | 39 | 46 | 60 | 54 | 58 | 41 | 60 | 48 |
| SW 170130 | 37 | 39 | 38 | 36 | 60 | 52 | 59 | 54 |
| SW 180133 | 26 | 42 | 30 | 37 | 59 | 42 | 59 | 49 |
| SW 180140 | 48 | 63 | 44 | 65 | 60 | 45 | 60 | 52 |
| TRI 1547.08 | 83 | 80 | 76 | 70 | 59 | 45 | 60 | 51 |
| WPB 15SW690-03 | 50 | 89 | 48 | 87 | 59 | 39 | 59 | 46 |
| Happy* | 71 | 87 | 45 | 85 | 57 | 43 | 60 | 45 |
| Hiie* | 82 | 82 | 55 | 75 | 56 | 47 | 60 | 53 |
| KWS Mistral* | 63 | 57 | 62 | 60 | 60 | 42 | 60 | 51 |
| Licamero* | 78 | 67 | 65 | 80 | 58 | 47 | 60 | 51 |

Jätkukatse / postregistration

| | | | | | | | | |
|--------------|----|----|----|----|----|----|----|----|
| Broca | 41 | 56 | 39 | 71 | 59 | 38 | 60 | 44 |
| Calixo | 75 | 54 | 41 | 76 | 58 | 47 | 59 | 49 |
| Cornetto | 66 | 41 | 46 | 67 | 59 | 41 | 60 | 45 |
| KWS Carusum | 53 | 43 | 64 | 50 | 60 | 49 | 60 | 53 |
| KWS Pensum | 65 | 75 | 62 | 96 | 60 | 47 | 59 | 51 |
| Happy* | 71 | 87 | 45 | 85 | 57 | 43 | 60 | 45 |
| Hiie* | 82 | 82 | 55 | 75 | 56 | 47 | 60 | 53 |
| KWS Mistral* | 63 | 57 | 62 | 60 | 60 | 42 | 60 | 51 |
| Licamero* | 78 | 67 | 65 | 80 | 58 | 47 | 60 | 51 |

* standardsort / standard variety

| Sort Variety | Taimede kõrgus, cm Height of plants, cm | | | | Lamandumine, Lodging, 1-9 palli/points (1=ei lamandu/not lodged) | | | |
|---------------------------|--|------|---------|---------|--|---------|---------|------|
| | Vijandi | Võru | Kuusiku | Vijandi | Võru | Kuusiku | Vijandi | Võru |
| ADD 294.10481 | 65 | 101 | 69 | 95 | 1,0 | 1,0 | 1,0 | 1,0 |
| ADD.294.11172 | 65 | 95 | 67 | 91 | 1,0 | 1,5 | 1,0 | 3,0 |
| KW 363-3-18 (KWs Barolum) | 68 | 100 | 71 | 98 | 1,0 | 4,0 | 1,0 | 3,0 |
| NOS 412013.06 (Nimrod) | 73 | 100 | 67 | 97 | 1,0 | 4,5 | 1,0 | 3,0 |
| NOS 414012.04 | 61 | 90 | 68 | 92 | 1,0 | 5,0 | 1,0 | 4,0 |
| NOS 414018.07 | 63 | 101 | 70 | 92 | 1,0 | 3,0 | 1,0 | 2,5 |
| SJ 18SW028 (Linnea) | 67 | 92 | 69 | 93 | 1,0 | 1,0 | 1,0 | 1,0 |
| SJ 18SW111 (Selina) | 66 | 105 | 75 | 102 | 1,0 | 2,5 | 1,0 | 1,5 |
| SW 160105 | 67 | 96 | 74 | 91 | 1,0 | 1,0 | 1,0 | 1,0 |
| SW 170130 | 66 | 113 | 65 | 102 | 1,0 | 4,5 | 1,0 | 5,0 |
| SW 180133 | 54 | 98 | 67 | 89 | 1,0 | 1,0 | 1,0 | 1,0 |
| SW 180140 | 58 | 104 | 73 | 99 | 1,0 | 2,5 | 1,0 | 2,5 |
| TRI 1547.08 | 68 | 98 | 72 | 92 | 1,0 | 1,5 | 1,0 | 3,0 |
| WPB 15SW690-03 | 55 | 98 | 71 | 90 | 1,0 | 1,0 | 1,0 | 1,0 |
| Happy* | 65 | 117 | 81 | 108 | 1,0 | 2,0 | 1,0 | 2,0 |
| Hiie* | 79 | 100 | 71 | 98 | 1,0 | 1,0 | 1,0 | 3,0 |
| KWS Mistral* | 62 | 92 | 61 | 93 | 1,0 | 1,0 | 1,0 | 1,5 |
| Licamero* | 64 | 95 | 65 | 94 | 1,0 | 3,0 | 1,0 | 3,0 |

Jätukutse / postregistration

| | | | | | | | | |
|--------------|----|-----|----|-----|-----|-----|-----|-----|
| Broca | 61 | 90 | 63 | 91 | 1,0 | 1,0 | 1,0 | 2,5 |
| Calixo | 65 | 99 | 71 | 98 | 1,0 | 1,5 | 1,0 | 3,0 |
| Cornetto | 58 | 88 | 67 | 86 | 1,0 | 1,0 | 1,0 | 1,0 |
| KWS Carusum | 66 | 99 | 68 | 97 | 1,0 | 5,0 | 1,0 | 3,0 |
| KWS Pensum | 61 | 99 | 68 | 91 | 1,0 | 1,0 | 1,0 | 2,0 |
| Happy* | 65 | 117 | 81 | 108 | 1,0 | 2,0 | 1,0 | 2,0 |
| Hiie* | 79 | 100 | 71 | 98 | 1,0 | 1,0 | 1,0 | 3,0 |
| KWS Mistral* | 62 | 92 | 61 | 93 | 1,0 | 1,0 | 1,0 | 1,5 |
| Licamero* | 64 | 95 | 65 | 94 | 1,0 | 3,0 | 1,0 | 3,0 |

* standardsort / standard variety

| Sort Variety | Haigused / Diseases, 1-9 p (1=nakkus puudub/not infected) | | | | | | | |
|---------------------------|--|------|---------|--------|---|------|---------|--------|
| | Nisu-pruunlaiksus <i>Drechlera tritici-repentis</i> | | | | Kõrreliste helelaiksus <i>Septoria spp</i> | | | |
| | Viljandi | Võru | Kuusiku | Jõgeva | Viljandi | Võru | Kuusiku | Jõgeva |
| ADD 294.10481 | 1,5 | 1,0 | 1,5 | 5,5 | 2,5 | 3,0 | 2,8 | 5,3 |
| ADD.294.11172 | 2,3 | 1,0 | 1,3 | 5,5 | 2,5 | 3,0 | 2,5 | 5,5 |
| KW 363-3-18 (KWs Barolum) | 1,0 | 1,3 | 1,3 | 6,0 | 3,8 | 3,0 | 2,8 | 5,3 |
| NOS 412013.06 (Nimrod) | 1,3 | 1,0 | 1,8 | 5,8 | 2,5 | 2,5 | 3,0 | 5,0 |
| NOS 414012.04 | 1,5 | 1,0 | 1,5 | 5,5 | 2,8 | 3,0 | 3,0 | 5,3 |
| NOS 414018.07 | 1,5 | 1,0 | 1,3 | 5,5 | 3,8 | 5,0 | 2,8 | 5,8 |
| SJ 18SW028 (Linnea) | 1,0 | 1,0 | 1,3 | 5,8 | 2,0 | 3,0 | 2,8 | 5,5 |
| SJ 18SW111 (Selina) | 1,3 | 1,0 | 1,8 | 6,0 | 3,5 | 2,0 | 2,5 | 5,5 |
| SW 160105 | 1,3 | 1,0 | 1,8 | 5,3 | 3,3 | 2,5 | 2,3 | 5,3 |
| SW 170130 | 1,0 | 1,0 | 1,8 | 5,3 | 2,8 | 3,5 | 2,5 | 5,8 |
| SW 180133 | 1,5 | 1,0 | 1,8 | 5,5 | 3,3 | 4,0 | 2,8 | 5,5 |
| SW 180140 | 1,3 | 1,0 | 1,5 | 5,5 | 2,5 | 4,5 | 2,8 | 5,8 |
| TRI 1547.08 | 1,5 | 1,0 | 2,0 | 5,8 | 2,3 | 3,0 | 3,0 | 5,3 |
| WPB 15SW690-03 | 1,3 | 1,0 | 1,0 | 6,0 | 2,5 | 4,0 | 2,5 | 5,5 |
| Happy* | 1,8 | 1,0 | 1,3 | 6,0 | 2,3 | 3,5 | 2,3 | 5,3 |
| Hiie* | 1,3 | 2,0 | 1,3 | 5,5 | 2,8 | 4,5 | 3,0 | 6,0 |
| KWS Mistral* | 1,8 | 1,5 | 1,3 | 5,8 | 2,3 | 2,5 | 2,5 | 6,0 |
| Licamero* | 1,0 | 1,0 | 1,5 | 5,5 | 3,5 | 2,8 | 3,3 | 5,3 |

Jätukukitse / postregistration

| | | | | | | | | |
|--------------|-----|-----|-----|-----|-----|-----|-----|-----|
| Broca | 1,8 | 1,5 | 1,5 | 5,3 | 3,5 | 4,0 | 2,5 | 5,0 |
| Calixo | 1,5 | 1,0 | 1,3 | 4,5 | 2,3 | 2,0 | 2,8 | 5,3 |
| Cornetto | 1,0 | 1,0 | 1,5 | 5,3 | 3,8 | 3,5 | 3,0 | 4,0 |
| KWS Carusum | 1,8 | 1,0 | 1,0 | 5,8 | 2,5 | 4,0 | 2,0 | 5,3 |
| KWS Pensum | 1,3 | 1,0 | 1,5 | 5,8 | 2,5 | 4,0 | 2,8 | 5,0 |
| Happy* | 1,8 | 1,0 | 1,3 | 6,0 | 2,3 | 3,5 | 2,3 | 5,3 |
| Hiie* | 1,3 | 2,0 | 1,3 | 5,5 | 2,8 | 4,5 | 3,0 | 6,0 |
| KWS Mistral* | 1,8 | 1,5 | 1,3 | 5,8 | 2,3 | 2,5 | 2,5 | 6,0 |
| Licamero* | 1,0 | 1,0 | 1,5 | 5,5 | 3,5 | 2,8 | 3,3 | 5,3 |

* standardsort / standard variety

| Sort Variety | Haigused / Diseases, 1-9 p (1=nakkus puudub/not infected) | | | | | | | |
|---------------------------|--|------|---------|--------|--|------|---------|--------|
| | Kõrreliste jahukaste <i>Blumeria graminis</i> | | | | Pruunrooste <i>Puccinia recondita</i> | | | |
| | Viljandi | Võru | Kuusiku | Jõgeva | Viljandi | Võru | Kuusiku | Jõgeva |
| ADD 294.10481 | 3,0 | 1,5 | 1,0 | 6,8 | 1,0 | 1,0 | 1,0 | 1,0 |
| ADD.294.11172 | 2,8 | 1,0 | 1,0 | 7,3 | 1,0 | 1,0 | 1,0 | 1,0 |
| KW 363-3-18 (KWs Barolum) | 2,5 | 1,5 | 1,0 | 6,0 | 1,0 | 1,0 | 1,0 | 1,0 |
| NOS 412013.06 (Nimrod) | 2,5 | 1,0 | 1,0 | 6,5 | 1,0 | 1,0 | 1,0 | 1,0 |
| NOS 414012.04 | 2,8 | 1,0 | 1,0 | 6,5 | 1,0 | 1,0 | 1,0 | 1,0 |
| NOS 414018.07 | 3,0 | 1,0 | 1,0 | 7,0 | 1,0 | 1,0 | 1,0 | 1,0 |
| SJ 18SW028 (Linnea) | 2,5 | 1,0 | 1,0 | 6,3 | 1,0 | 1,0 | 1,0 | 1,0 |
| SJ 18SW111 (Selina) | 2,3 | 1,0 | 1,0 | 5,5 | 1,0 | 1,0 | 1,0 | 1,0 |
| SW 160105 | 3,0 | 1,0 | 1,0 | 5,8 | 1,0 | 1,0 | 1,0 | 1,0 |
| SW 170130 | 2,8 | 1,0 | 1,0 | 6,3 | 1,0 | 1,0 | 1,0 | 1,0 |
| SW 180133 | 3,5 | 1,0 | 1,0 | 6,5 | 1,0 | 1,0 | 1,0 | 1,0 |
| SW 180140 | 2,5 | 1,0 | 1,0 | 5,8 | 1,0 | 1,0 | 1,0 | 1,0 |
| TRI 1547.08 | 3,5 | 1,0 | 1,0 | 7,0 | 1,0 | 1,0 | 1,0 | 1,0 |
| WPB 15SW690-03 | 3,5 | 1,5 | 1,0 | 6,0 | 1,0 | 1,0 | 1,0 | 1,0 |
| Happy* | 3,8 | 1,0 | 1,0 | 5,5 | 1,0 | 1,0 | 1,0 | 1,0 |
| Hiie* | 4,3 | 1,5 | 1,0 | 7,0 | 1,0 | 1,0 | 1,0 | 1,0 |
| KWS Mistral* | 3,0 | 1,0 | 1,0 | 6,8 | 1,0 | 1,0 | 1,0 | 1,0 |
| Licamero* | 3,5 | 1,0 | 1,0 | 6,3 | 1,0 | 1,0 | 1,0 | 1,0 |

Jätukatse / postregistration

| | | | | | | | | |
|--------------|-----|-----|-----|-----|-----|-----|-----|-----|
| Broca | 3,0 | 1,0 | 1,0 | 5,8 | 1,0 | 1,0 | 1,0 | 1,0 |
| Calixo | 3,0 | 1,0 | 1,0 | 6,5 | 1,0 | 1,0 | 1,0 | 1,0 |
| Cornetto | 3,3 | 1,0 | 1,0 | 5,8 | 1,0 | 1,0 | 1,0 | 1,0 |
| KWS Carusum | 3,8 | 1,0 | 1,0 | 5,8 | 1,0 | 1,0 | 1,0 | 1,0 |
| KWS Pensum | 3,3 | 1,0 | 1,0 | 5,8 | 1,0 | 1,0 | 1,0 | 1,0 |
| Happy* | 3,8 | 1,0 | 1,0 | 5,5 | 1,0 | 1,0 | 1,0 | 1,0 |
| Hiie* | 4,3 | 1,5 | 1,0 | 7,0 | 1,0 | 1,0 | 1,0 | 1,0 |
| KWS Mistral* | 3,0 | 1,0 | 1,0 | 6,8 | 1,0 | 1,0 | 1,0 | 1,0 |
| Licamero* | 3,5 | 1,0 | 1,0 | 6,3 | 1,0 | 1,0 | 1,0 | 1,0 |

* standardsort / standard variety

SUVIODER / SPRING BARLEY

Hordeum vulgare L.

Suviodra sortide tunnustamine 2022*

| Sort | Pind, ha | Sort | Pind, ha | Sort | Pind, ha | Sort | Pind, ha |
|-----------|----------|------------|----------|-------------|----------|----------|----------|
| Iron | 265,72 | Bente | 97,50 | Hermann | 53,02 | Severi | 35,00 |
| KWS Irina | 205,64 | Klarinette | 94,85 | Kaarle | 50,74 | Overture | 23,08 |
| Jyvä | 203,01 | Aukusti | 87,11 | Toria | 49,14 | Kingdom | 20,01 |
| Feedway | 153,25 | Maali | 86,50 | SY Tungsten | 44,70 | Alvari | 19,50 |
| Soldo | 153,01 | Wolmari | 72,92 | Selene | 43,28 | SY Solar | 15,72 |
| Eversti | 152,13 | KWS Fantex | 63,43 | Laureate | 40,77 | Shetty | 7,90 |
| Fennica | 123,36 | Vanille | 62,05 | Harbinger | 39,02 | Onerva | 5,70 |
| Tuuli | 119,87 | Brage | 53,98 | Prospect | 37,60 | | |

* Vastavalt PTA põldtunnustamise andmetele / according to AFB field inspection data

Katse agrotehnika / Agrotechnics of the trial 2022

| VILJANDI | VÕRU | KUUSIKU | JÕGEVA |
|----------|------|---------|--------|
|----------|------|---------|--------|

Mullaliik / Soil

| LP(g) | LP | Kr | KI |
|-------|----|----|----|
|-------|----|----|----|

Eelvil / Previous crop

| suvivikk / common vetch | peakapsas / cabbage | taliraps / winter oilseed rape | punane ristik / red clover |
|----------------------------|------------------------|-----------------------------------|-------------------------------|
|----------------------------|------------------------|-----------------------------------|-------------------------------|

Külvikuupäev / Sowing date

| 03.05.2022 | 05.05.2022 | 05.05.2022 | 29.04.2022 |
|------------|------------|------------|------------|
|------------|------------|------------|------------|

Külvinorm / Sowing rate: 400 id.tera/m² / germinating seeds per m²

Väetis (TA kg/ha); väetamise aeg / Fertilizer - level of N-P-K; Time of fertilization

| N | P | K | S | mikrod | N | P | K | S | mikrod | N | P | K | S | mikrod | N | P | K | S | mikrod |
|----------------------|----|----|----|-----------------|------------|----|----|----|-----------------|------------|----|----|----|--------|------------|----|----|----|-------------------|
| 29.04.2022 | | | | | 04.05.2022 | | | | | 02.05.2022 | | | | | 25.04.2022 | | | | |
| 72 | 19 | 43 | 10 | B-0,08; Mg-4 | 72 | 19 | 43 | 10 | B-0,08; Mg-4 | 56 | 24 | 70 | 10 | B-0,08 | 60 | 16 | 36 | 9 | B-0,07; Mg-3,3 |
| 01.06.2022 | | | | | 07.06.2022 | | | | | 23.05.2022 | | | | | 13.06.2022 | | | | |
| 41 | | | 6 | | 26 | | | 13 | | 54 | | | 8 | | 46 | | | 7 | |
| 20.06.2022 | | | | | 17.06.2022 | | | | | | | | | | | | | | |
| 30 | | | 8 | Ca-8; Mg-0,6 | 26 | | | 13 | | | | | | | | | | | |
| 01.06.2022 | | | | | | | | | | | | | | | | | | | |
| Gramitrel - 1,5 l/ha | | | | | | | | | | | | | | | | | | | |
| 15. ja 20.06.2022 | | | | | | | | | | | | | | | | | | | |
| Delfan - 0,5 l/ha | | | | | | | | | | | | | | | | | | | |
| 143 | 19 | 43 | 24 | Kokku | 124 | 19 | 43 | 36 | Kokku | 110 | 24 | 70 | 18 | Kokku | 106 | 16 | 36 | 16 | Kokku |

Taimekaitse: (norm l/ha, töötl. kuupäev) / Plant protection (litre per hectare, date of the treatment)

| VILJANDI | VÕRU | KUUSIKU | JÕGEVA |
|--|-------------------------|---------------------|------------------------|
| Puhtimine / Seed treatment - Vibrance Pro 2,0 l/t seemnete kohta / 2,0 l per 1 t seeds | | | |
| 01.06.2022 | 01.06.2022 | 30.05.2022 | 01.06.2022 |
| Ariane S - 2,5 l/ha | Trimmer 50 SG - 15 g/ha | Ariane S - 2,0 l/ha | Granstar Preemia 50 |
| Balaya - 0,4 l/ha | | Input - 1,0 l/ha | SX - 20 g/ha |
| Flexity - 0,25 l/ha | MCPA - 1,5 l/ha | | Primus - 80 ml/ha |
| 15.06.2022 | 22.06.2022 | | 20.06.2022 |
| 2,4 D Nufarm - 1,25 l/ha | Curbatur - 0,4 l/ha | | Priaxor - 0,8 l/ha |
| | Priaxor - 0,4 l/ha | | 01.07.2022 |
| 20.06.2022 | | | Ascra Xpro - 0,75 l/ha |
| Revytrex - 1,0 l/ha | | | Decis Mega - 0,15 l/ha |
| 21.06.2022 | | | |
| Axial 50 EC - 0,8 l/ha | | | |

Suviadra katseandmed

| Sort Variety | Arvestuslik saak, kg/ha Yield, kg/ha | | | | | | | |
|---------------------------|---|-----|-------|-----|---------|-----|--------|-----|
| | Viljandi | | Võru | | Kuusiku | | Jõgeva | |
| | kg/ha | % | kg/ha | % | kg/ha | % | kg/ha | % |
| BR 14007b1 | 5096 | 103 | 9558 | 112 | 6999 | 100 | 7734 | 103 |
| Br 14052a1(Lexy) | 5871 | 119 | 9546 | 112 | 7145 | 102 | 8804 | 117 |
| BR 1491214 | 5123 | 104 | 9648 | 113 | 6390 | 91 | 7773 | 104 |
| Br11823i4 (Vanille) | 4966 | 101 | 8961 | 105 | 6176 | 88 | 7576 | 101 |
| Br14049h1 | 5338 | 108 | 9068 | 106 | 7340 | 104 | 7083 | 94 |
| Br14812h2 | 5744 | 116 | 9421 | 110 | 7811 | 111 | 8000 | 107 |
| KWS 17/2942 (KWS Thalix) | 5277 | 107 | 9403 | 110 | 7962 | 113 | 7188 | 96 |
| KWS 18/3518 (KWS Premis) | 6011 | 122 | 9899 | 116 | 7905 | 112 | 8361 | 111 |
| LGBN16509-4 (LG Flamenco) | 5164 | 105 | 10083 | 118 | 7881 | 112 | 8864 | 118 |
| SJ 164377 (Annika) | 5019 | 102 | 9550 | 112 | 7573 | 108 | 8476 | 113 |
| SJ 176305 (Wish) | 5320 | 108 | 8525 | 100 | 7801 | 111 | 7195 | 96 |
| Iron* | 5295 | | 8611 | | 7069 | | 7716 | |
| Maali* | 4054 | 100 | 7617 | 100 | 5924 | 100 | 5937 | 100 |
| Soldo* | 5466 | | 9396 | | 8101 | | 8877 | |
| PD5% (LSD) | 1033 | | 451 | | 947 | | 578 | |

Jätukatse / postregistration

| | | | | | | | | |
|------------|------|-----|------|-----|------|-----|------|-----|
| Feedway | 5699 | 115 | 9590 | 112 | 8737 | 124 | 6520 | 87 |
| Firefoxx | 6615 | 134 | 9416 | 110 | 8504 | 121 | 8187 | 109 |
| Katniss | 4992 | 101 | 8535 | 100 | 7697 | 109 | 6453 | 86 |
| Skyway | 5389 | 109 | 9090 | 106 | 7225 | 103 | 7247 | 96 |
| Iron* | 5295 | | 8611 | | 7069 | | 7716 | |
| Maali* | 4054 | 100 | 7617 | 100 | 5924 | 100 | 5937 | 100 |
| Soldo* | 5466 | | 9396 | | 8101 | | 8877 | |
| PD5% (LSD) | 1004 | | 470 | | 645 | | 650 | |

* standardsort / standard variety

| Sort Variety | Proteiin kuivaines, % Protein d.m, % | | | | Kasvuaeg, päeva Growing period, days | | | |
|---------------------------|---|------|---------|--------|---|------|---------|--------|
| | Viljandi | Võru | Kuusiku | Jõgeva | Viljandi | Võru | Kuusiku | Jõgeva |
| BR 14007b1 | 13,1 | 12,6 | 13,4 | 12,0 | 94 | 94 | 91 | 99 |
| Br 14052a1(Lexy) | 12,9 | 12,8 | 15,0 | 12,1 | 92 | 95 | 92 | 99 |
| BR 1491214 | 14,1 | 12,7 | 16,2 | 12,8 | 92 | 94 | 91 | 97 |
| Br11823i4 (Vanille) | 13,5 | 13,4 | 16,5 | 12,1 | 92 | 94 | 95 | 97 |
| Br14049h1 | 13,2 | 13,4 | 14,6 | 12,9 | 92 | 94 | 91 | 97 |
| Br14812h2 | 13,9 | 12,5 | 14,3 | 13,2 | 94 | 94 | 93 | 99 |
| KWS 17/2942 (KWS Thalís) | 13,7 | 13,0 | 14,0 | 12,5 | 91 | 94 | 92 | 98 |
| KWS 18/3518 (KWS Premis) | 12,8 | 12,0 | 14,1 | 11,8 | 92 | 94 | 92 | 98 |
| LGBN16509-4 (LG Flamenco) | 13,0 | 12,5 | 13,9 | 11,9 | 94 | 95 | 92 | 100 |
| SJ 164377 (Annika) | 13,1 | 12,1 | 13,6 | 11,8 | 95 | 95 | 92 | 98 |
| SJ 176305 (Wish) | 13,1 | 12,1 | 13,4 | 12,4 | 93 | 95 | 94 | 100 |
| Iron* | 14,3 | 13,5 | 16,5 | 13,1 | 94 | 95 | 92 | 98 |
| Maali* | 16,0 | 15,2 | 17,7 | 14,7 | 94 | 95 | 92 | 97 |
| Soldo* | 13,8 | 13,6 | 14,4 | 12,8 | 94 | 95 | 94 | 99 |

Jätukutse / postregistration

| | | | | | | | | |
|---------|------|------|------|------|----|----|----|-----|
| Feedway | 13,2 | 13,0 | 14,4 | 12,2 | 92 | 94 | 91 | 97 |
| Firefox | 13,8 | 12,2 | 13,8 | 12,2 | 94 | 94 | 94 | 100 |
| Katniss | 14,6 | 13,0 | 13,5 | 13,0 | 94 | 95 | 92 | 98 |
| Skyway | 13,0 | 12,8 | 14,7 | 12,7 | 95 | 94 | 92 | 100 |
| Iron* | 14,3 | 13,5 | 16,5 | 13,1 | 94 | 95 | 92 | 98 |
| Maali* | 16,0 | 15,2 | 17,7 | 14,7 | 94 | 95 | 92 | 97 |
| Soldo* | 13,8 | 13,6 | 14,4 | 12,8 | 94 | 95 | 94 | 99 |

* standardsort / standard variety

| Sort Variety | Mahukaal, g/l Volume weight, g/l | | | | 1000 tera mass, g 1000 kernel weight, g | | | |
|---------------------------|-------------------------------------|------|---------|--------|--|------|---------|--------|
| | Viljandi | Võru | Kuusiku | Jõgeva | Viljandi | Võru | Kuusiku | Jõgeva |
| BR 14007b1 | 636 | 620 | 677 | 661 | 40,5 | 44,8 | 47,7 | 46,5 |
| Br 14052a1(Lexy) | 656 | 607 | 654 | 651 | 45,6 | 46,1 | 46,6 | 48,6 |
| BR 1491214 | 625 | 582 | 603 | 638 | 46,3 | 45,5 | 39,0 | 48,4 |
| Br11823i4 (Vanille) | 638 | 636 | 631 | 637 | 43,3 | 43,0 | 39,9 | 43,7 |
| Br14049h1 | 660 | 661 | 664 | 656 | 42,4 | 43,5 | 44,4 | 44,3 |
| Br14812h2 | 655 | 658 | 661 | 651 | 42,3 | 45,7 | 45,9 | 44,7 |
| KWS 17/2942 (KWS Thalís) | 644 | 658 | 673 | 656 | 40,7 | 46,2 | 46,3 | 45,7 |
| KWS 18/3518 (KWS Premis) | 649 | 660 | 672 | 672 | 41,9 | 46,6 | 48,2 | 47,2 |
| LGBN16509-4 (LG Flamenco) | 663 | 658 | 662 | 673 | 45,6 | 49,1 | 49,1 | 49,7 |
| SJ 164377 (Annika) | 641 | 660 | 660 | 659 | 41,1 | 44,7 | 45,0 | 45,2 |
| SJ 176305 (Wish) | 645 | 641 | 652 | 629 | 44,8 | 48,4 | 51,0 | 47,6 |
| Iron* | 672 | 661 | 643 | 678 | 42,6 | 41,9 | 43,4 | 43,5 |
| Maali* | 648 | 670 | 644 | 660 | 40,7 | 43,5 | 41,0 | 44,2 |
| Soldo* | 675 | 672 | 688 | 678 | 47,8 | 50,2 | 53,2 | 51,1 |

Jätkukatse / postregistration

| | | | | | | | | |
|----------|-----|-----|-----|-----|------|------|------|------|
| Feedway | 650 | 687 | 697 | 683 | 39,2 | 45,4 | 46,7 | 44,4 |
| Firefoxx | 658 | 645 | 665 | 651 | 46,0 | 48,0 | 50,4 | 48,8 |
| Katniss | 657 | 650 | 675 | 647 | 48,2 | 48,0 | 51,9 | 46,6 |
| Skyway | 659 | 657 | 654 | 637 | 45,8 | 45,5 | 46,2 | 44,6 |
| Iron* | 672 | 661 | 643 | 678 | 42,6 | 41,9 | 43,4 | 43,5 |
| Maali* | 648 | 670 | 644 | 660 | 40,7 | 43,5 | 41,0 | 44,2 |
| Soldo* | 675 | 672 | 688 | 678 | 47,8 | 50,2 | 53,2 | 51,1 |

* standardsort / standard variety

| Sort Variety | Jääk sõelal 2,8 mm, % Sieving >2,8 mm, % sieve | | | | Ohete eemaldumine, 1-3 p (1=kergesti, 3=raskesti) Removal of awns, 1-3 p (1=slightly, 3=hardly) | | | |
|---------------------------|---|------|---------|--------|--|------|---------|--------|
| | Viljandi | Võru | Kuusiku | Jõgeva | Viljandi | Võru | Kuusiku | Jõgeva |
| BR 14007b1 | 62,0 | 72,9 | 86,1 | 81,3 | 1,0 | 2,0 | 2,0 | 2,0 |
| Br 14052a1 (Lexy) | 76,7 | 72,3 | 71,3 | 78,4 | 1,0 | 2,0 | 1,0 | 2,0 |
| BR 1491214 | 72,5 | 70,7 | 41,3 | 75,7 | 1,0 | 2,0 | 2,0 | 2,8 |
| Br11823i4 (Vanille) | 62,9 | 67,6 | 96,7 | 71,5 | 1,0 | 2,0 | 2,0 | 2,0 |
| Br14049h1 | 66,8 | 74,8 | 73,2 | 71,4 | 1,0 | 2,0 | 1,0 | 2,0 |
| Br14812h2 | 73,6 | 76,3 | 79,2 | 79,5 | 1,0 | 2,0 | 1,0 | 2,0 |
| KWS 17/2942 (KWS Thalís) | 62,1 | 74,9 | 76,2 | 79,0 | 1,0 | 2,0 | 1,0 | 2,5 |
| KWS 18/3518 (KWS Premis) | 69,8 | 81,8 | 86,0 | 80,5 | 1,0 | 2,0 | 1,0 | 1,0 |
| LGBN16509-4 (LG Flamenco) | 71,7 | 75,1 | 84,5 | 80,6 | 1,0 | 2,0 | 1,0 | 1,5 |
| SJ 164377 (Annika) | 69,5 | 73,9 | 77,9 | 80,0 | 1,0 | 2,0 | 1,0 | 2,0 |
| SJ 176305 (Wish) | 81,9 | 87,8 | 89,1 | 86,3 | 1,0 | 2,0 | 1,0 | 1,0 |
| Iron* | 76,2 | 73,0 | 77,9 | 77,0 | 1,0 | 2,0 | 1,0 | 2,0 |
| Maali* | 54,1 | 69,4 | 54,5 | 68,8 | 1,0 | 2,0 | 1,0 | 2,0 |
| Soldo* | 79,7 | 77,8 | 89,8 | 79,6 | 1,0 | 2,0 | 1,0 | 1,5 |

Jätukutse / postregistration

| | | | | | | | | |
|----------|------|------|------|------|-----|-----|-----|-----|
| Feedway | 49,7 | 69,1 | 69,1 | 65,8 | 1,0 | 2,0 | 1,0 | 2,5 |
| Firefoxx | 75,0 | 79,6 | 83,7 | 82,7 | 1,0 | 2,0 | 1,0 | 1,8 |
| Katniss | 84,5 | 86,1 | 91,3 | 82,4 | 1,0 | 2,0 | 1,0 | 2,5 |
| Skyway | 84,3 | 83,6 | 83,6 | 81,6 | 1,0 | 2,0 | 1,0 | 2,0 |
| Iron* | 76,2 | 73,0 | 77,9 | 77,0 | 1,0 | 2,0 | 1,0 | 2,0 |
| Maali* | 54,1 | 69,4 | 54,5 | 68,8 | 1,0 | 2,0 | 1,0 | 2,0 |
| Soldo* | 79,7 | 77,8 | 89,8 | 79,6 | 1,0 | 2,0 | 1,0 | 1,5 |

* standardsort / standard variety

| Sort Variety | Taimede kõrgus, cm Height of plants, cm | | | | Lamandumine / Lodging, 1-9 p (1=ei lamandu/ not lodged) | | | |
|---------------------------|--|------|---------|--------|---|------|---------|--------|
| | Viljandi | Võru | Kuusiku | Jõgeva | Viljandi | Võru | Kuusiku | Jõgeva |
| BR 14007b1 | 63 | 83 | 72 | 83 | 1,0 | 7,3 | 1,0 | 4,5 |
| Br 14052a1(Lexy) | 66 | 79 | 73 | 80 | 1,0 | 4,8 | 1,0 | 3,5 |
| BR 1491214 | 63 | 76 | 70 | 74 | 1,0 | 5,0 | 1,0 | 3,0 |
| Br11823i4 (Vanille) | 61 | 82 | 73 | 79 | 1,0 | 6,5 | 1,0 | 3,0 |
| Br14049h1 | 59 | 76 | 70 | 76 | 1,0 | 5,5 | 1,3 | 7,5 |
| Br14812h2 | 62 | 77 | 69 | 79 | 1,0 | 5,0 | 1,5 | 5,0 |
| KWS 17/2942 (KWS Thalís) | 61 | 77 | 76 | 79 | 1,0 | 5,5 | 1,0 | 7,0 |
| KWS 18/3518 (KWS Premis) | 60 | 77 | 71 | 76 | 1,0 | 4,0 | 1,0 | 3,0 |
| LGBN16509-4 (LG Flamenco) | 53 | 76 | 68 | 72 | 1,0 | 5,8 | 1,3 | 3,0 |
| SJ 164377 (Annika) | 57 | 78 | 73 | 76 | 1,0 | 4,0 | 1,0 | 3,0 |
| SJ 176305 (Wish) | 63 | 80 | 73 | 81 | 1,3 | 6,8 | 1,0 | 7,0 |
| Iron* | 61 | 80 | 76 | 80 | 1,0 | 5,8 | 1,0 | 3,5 |
| Maali* | 64 | 85 | 82 | 87 | 1,0 | 7,0 | 1,0 | 5,5 |
| Soldo* | 60 | 79 | 71 | 78 | 1,0 | 2,0 | 1,0 | 3,0 |

Jätukukitse / postregistration

| | | | | | | | | |
|----------|----|----|----|----|-----|-----|-----|-----|
| Feedway | 58 | 73 | 73 | 70 | 1,0 | 6,5 | 1,0 | 4,5 |
| Firefoxx | 62 | 76 | 72 | 77 | 1,0 | 5,8 | 2,0 | 7,5 |
| Katniss | 64 | 82 | 82 | 86 | 1,3 | 7,0 | 1,8 | 7,0 |
| Skyway | 67 | 85 | 80 | 85 | 1,3 | 6,8 | 1,0 | 7,0 |
| Iron* | 61 | 80 | 76 | 80 | 1,0 | 5,8 | 1,0 | 3,5 |
| Maali* | 64 | 85 | 82 | 87 | 1,0 | 7,0 | 1,0 | 5,5 |
| Soldo* | 60 | 79 | 71 | 78 | 1,0 | 2,0 | 1,0 | 3,0 |

* standardsort / standard variety

| Sort Variety | Haigused / Diseases, 1-9 p (1=nakkus puudub/not infected) | | | | | | | |
|---------------------------|--|------|---------|--------|---|------|---------|--------|
| | Odra-võrklaikus <i>Pyrenophora teres f. teres</i> | | | | Kõrreliste pruunlaikus <i>Cochliobolus sativus</i> | | | |
| | Viljandi | Võru | Kuusiku | Jõgeva | Viljandi | Võru | Kuusiku | Jõgeva |
| BR 14007b1 | 2,5 | 1,0 | 1,8 | 5,0 | 2,3 | 7,3 | 1,0 | 4,0 |
| Br 14052a1 (Lexy) | 1,5 | 1,0 | 2,3 | 5,8 | 3,3 | 6,8 | 1,0 | 4,0 |
| BR 1491214 | 1,8 | 1,0 | 1,3 | 5,5 | 1,5 | 6,0 | 1,0 | 4,0 |
| Br11823i4 (Vanille) | 1,0 | 1,0 | 1,5 | 5,5 | 2,0 | 7,3 | 1,0 | 4,0 |
| Br14049h1 | 2,5 | 1,0 | 2,0 | 5,3 | 3,0 | 6,8 | 1,0 | 3,3 |
| Br14812h2 | 2,0 | 1,0 | 1,8 | 5,0 | 1,8 | 6,5 | 1,0 | 3,3 |
| KWS 17/2942 (KWS Thalís) | 3,0 | 1,0 | 1,8 | 5,0 | 2,3 | 7,3 | 1,0 | 2,5 |
| KWS 18/3518 (KWS Premis) | 2,5 | 1,0 | 1,8 | 5,3 | 3,3 | 7,3 | 1,0 | 3,3 |
| LGBN16509-4 (LG Flamenco) | 2,3 | 1,0 | 2,0 | 5,8 | 3,8 | 6,5 | 1,0 | 4,3 |
| SJ 164377 (Annika) | 1,8 | 1,0 | 1,8 | 5,0 | 2,0 | 6,3 | 1,0 | 2,5 |
| SJ 176305 (Wish) | 2,3 | 1,0 | 1,8 | 5,5 | 1,3 | 7,3 | 1,0 | 2,5 |
| Iron* | 1,5 | 1,0 | 1,8 | 6,0 | 1,5 | 6,5 | 1,0 | 4,0 |
| Maali* | 3,5 | 1,0 | 3,0 | 5,5 | 1,5 | 5,3 | 1,0 | 3,5 |
| Soldo* | 1,8 | 1,0 | 1,8 | 5,5 | 2,3 | 7,0 | 1,0 | 4,0 |

Jätkukatse / postregistration

| | | | | | | | | |
|----------|-----|-----|-----|-----|-----|-----|-----|-----|
| Feedway | 1,5 | 1,0 | 1,8 | 5,3 | 1,5 | 7,0 | 1,0 | 3,3 |
| Firefoxx | 1,8 | 1,0 | 1,8 | 5,0 | 1,5 | 7,3 | 1,0 | 3,3 |
| Katniss | 1,8 | 1,0 | 1,8 | 5,0 | 1,5 | 7,0 | 1,0 | 3,3 |
| Skyway | 2,8 | 1,0 | 1,8 | 5,3 | 1,5 | 8,0 | 1,0 | 3,3 |
| Iron* | 1,5 | 1,0 | 1,8 | 6,0 | 1,5 | 6,5 | 1,0 | 4,0 |
| Maali* | 3,5 | 1,0 | 3,0 | 5,5 | 1,5 | 5,3 | 1,0 | 3,5 |
| Soldo* | 1,8 | 1,0 | 1,8 | 5,5 | 2,3 | 7,0 | 1,0 | 4,0 |

* standardsort / standard variety

| Sort Variety | Haigused / Diseases, 1-9 p (1=nakkus puudub/not infected) | | | | | | | |
|---------------------------|--|------|---------|--------|---|------|---------|--------|
| | Kõrreliste jahukaste <i>Blumeria graminis</i> | | | | Äärislaiksus <i>Rhynchosporium secalis</i> | | | |
| | Vijandi | Võru | Kuusiku | Jõgeva | Vijandi | Võru | Kuusiku | Jõgeva |
| BR 14007b1 | 1,5 | 1,0 | 1,0 | 1,0 | 1,0 | 1,5 | 1,5 | 1,0 |
| Br 14052a1(Lexy) | 1,0 | 1,0 | 1,0 | 2,3 | 1,3 | 1,0 | 1,3 | 1,0 |
| BR 1491214 | 1,0 | 1,0 | 1,0 | 1,0 | 1,0 | 1,5 | 1,3 | 1,0 |
| Br11823i4 (Vanille) | 1,0 | 1,0 | 1,0 | 1,0 | 1,0 | 1,0 | 1,3 | 1,0 |
| Br14049h1 | 1,0 | 1,0 | 1,0 | 2,3 | 1,0 | 1,0 | 1,0 | 1,0 |
| Br14812h2 | 1,0 | 1,0 | 1,0 | 2,0 | 1,3 | 1,0 | 1,0 | 1,0 |
| KWS 17/2942 (KWS Thalís) | 1,0 | 1,0 | 1,0 | 1,0 | 2,0 | 1,5 | 1,3 | 1,0 |
| KWS 18/3518 (KWS Premis) | 1,0 | 1,0 | 1,0 | 1,0 | 1,0 | 1,0 | 1,0 | 1,0 |
| LGBN16509-4 (LG Flamenco) | 1,0 | 1,0 | 1,0 | 5,8 | 1,0 | 1,0 | 1,0 | 1,0 |
| SJ 164377 (Annika) | 1,0 | 2,0 | 1,0 | 1,0 | 1,0 | 1,5 | 1,3 | 3,0 |
| SJ 176305 (Wish) | 1,0 | 1,0 | 1,0 | 3,3 | 1,0 | 1,0 | 1,3 | 1,0 |
| Iron* | 1,0 | 1,0 | 1,0 | 6,5 | 1,8 | 1,0 | 1,3 | 1,0 |
| Maali* | 1,0 | 3,0 | 1,0 | 7,3 | 1,0 | 1,0 | 1,0 | 1,0 |
| Soldo* | 1,0 | 1,0 | 1,0 | 1,0 | 1,0 | 1,0 | 1,0 | 1,0 |

Jätukukitse / postregistration

| | | | | | | | | |
|----------|-----|-----|-----|-----|-----|-----|-----|-----|
| Feedway | 1,0 | 1,0 | 1,0 | 1,0 | 1,0 | 1,0 | 1,0 | 1,0 |
| Firefoxx | 1,0 | 1,0 | 1,0 | 1,0 | 1,0 | 1,0 | 1,3 | 1,0 |
| Katniss | 1,3 | 1,0 | 1,0 | 1,0 | 1,0 | 1,5 | 1,0 | 1,0 |
| Skyway | 1,5 | 1,0 | 1,0 | 1,0 | 1,0 | 1,0 | 1,0 | 1,0 |
| Iron* | 1,0 | 1,0 | 1,0 | 6,5 | 1,8 | 1,0 | 1,3 | 1,0 |
| Maali* | 1,0 | 3,0 | 1,0 | 7,3 | 1,0 | 1,0 | 1,0 | 1,0 |
| Soldo* | 1,0 | 1,0 | 1,0 | 1,0 | 1,0 | 1,0 | 1,0 | 1,0 |

* standardsort / standard variety

Varajase suviodka katseandmed

| Sort Variety | Arvestuslik saak / Yield, kg/ha | | | | | | | |
|-------------------|---------------------------------|-----|-------|-----|---------|-----|--------|-----|
| | Viljandi | | Võru | | Kuusiku | | Jõgeva | |
| | kg/ha | % | kg/ha | % | kg/ha | % | kg/ha | % |
| SWA 17525 (Assar) | 4237 | 109 | 5655 | 68 | 5521 | 77 | 4508 | 73 |
| SWA 17560 (Aron) | 3786 | 98 | 7501 | 90 | 6322 | 89 | 6021 | 97 |
| SWA 17575 (Arvid) | 4221 | 109 | 6893 | 83 | 5591 | 78 | 6535 | 105 |
| Brage* | 3988 | 100 | 8532 | 100 | 7576 | 100 | 6774 | 100 |
| Wolmari* | 3769 | | 8126 | | 6692 | | 5623 | |
| PD5% (LSD) | 404 | | 519 | | 423 | | 483 | |

| Sort Variety | Proteiin kuivaines, % Protein d.m, % | | | | Kasvuaeg, päeva Growing period, days | | | |
|-------------------|---|------|---------|--------|---|------|---------|--------|
| | Viljandi | Võru | Kuusiku | Jõgeva | Viljandi | Võru | Kuusiku | Jõgeva |
| SWA 17525 (Assar) | 14,2 | 15,0 | 14,0 | 13,5 | 78 | 87 | 81 | 91 |
| SWA 17560 (Aron) | 16,3 | 15,5 | 15,9 | 14,1 | 76 | 84 | 80 | 87 |
| SWA 17575 (Arvid) | 16,4 | 15,3 | 16,8 | 14,6 | 77 | 86 | 80 | 87 |
| Brage* | 15,4 | 13,6 | 14,4 | 12,5 | 76 | 83 | 80 | 88 |
| Wolmari* | 17,3 | 13,2 | 16,4 | 13,8 | 76 | 82 | 80 | 87 |

| Sort Variety | Mahukaal, g/l Volume weight, g/l | | | | 1000 tera mass, g 1000 kernel weight, g | | | |
|-------------------|-------------------------------------|------|---------|--------|--|------|---------|--------|
| | Viljandi | Võru | Kuusiku | Jõgeva | Viljandi | Võru | Kuusiku | Jõgeva |
| SWA 17525 (Assar) | 578 | 659 | 693 | 689 | 26,6 | 41,6 | 36,4 | 41,2 |
| SWA 17560 (Aron) | 534 | 642 | 672 | 655 | 22,4 | 37,4 | 37,0 | 33,0 |
| SWA 17575 (Arvid) | 564 | 628 | 651 | 677 | 26,8 | 38,5 | 36,5 | 37,8 |
| Brage* | 539 | 641 | 685 | 666 | 23,0 | 36,5 | 36,2 | 33,4 |
| Wolmari* | 496 | 624 | 658 | 625 | 21,4 | 37,1 | 38,2 | 32,3 |

| Sort Variety | Jääk sõelal 2,8 mm, % Sieving >2,8 mm, % sieve | | | | Ohete eemaldumine 1-3 p (1=kergesti, 3=raskesti) Removal of awns, 1-3 p (1=slightly, 3=hardly) | | | |
|-------------------|---|------|---------|--------|---|------|---------|--------|
| | Viljandi | Võru | Kuusiku | Jõgeva | Viljandi | Võru | Kuusiku | Jõgeva |
| SWA 17525 (Assar) | 6,6 | 75,2 | 81,1 | 95,9 | 2,0 | 1,0 | 1,0 | 1,0 |
| SWA 17560 (Aron) | 2,9 | 47,2 | 82,5 | 65,8 | 2,0 | 1,0 | 1,0 | 1,0 |
| SWA 17575 (Arvid) | 9,3 | 63,2 | 86,7 | 89,4 | 2,0 | 1,0 | 1,0 | 1,0 |
| Brage* | 1,8 | 32,6 | 80,1 | 64,0 | 2,0 | 1,0 | 1,0 | 1,0 |
| Wolmari* | 2,1 | 23,1 | 75,9 | 40,1 | 2,0 | 1,0 | 1,0 | 1,0 |

* standardsort / standard variety

| Sort Variety | Taimede kõrgus, cm Height of plants, cm | | | | Lamandumine / Lodging, 1-9 p (1=ei lamandu/not lodged) | | | |
|-------------------|--|------|---------|--------|---|------|---------|--------|
| | Viljandi | Võru | Kuusiku | Jõgeva | Viljandi | Võru | Kuusiku | Jõgeva |
| SWA 17525 (Assar) | 69 | 93 | 70 | 88 | 1,0 | 1,0 | 1,0 | 3,0 |
| SWA 17560 (Aron) | 72 | 103 | 82 | 93 | 1,0 | 4,3 | 1,8 | 6,5 |
| SWA 17575 (Arvid) | 76 | 105 | 82 | 96 | 1,0 | 4,0 | 1,0 | 4,0 |
| Brage* | 73 | 94 | 74 | 89 | 1,0 | 2,5 | 1,0 | 7,0 |
| Wolmari* | 72 | 89 | 73 | 84 | 1,0 | 4,3 | 1,3 | 6,0 |

Haigused / Diseases, 1-9 p (1=nakkus puudub/not infected)

| Sort Variety | Odra-võrklaikus <i>Pyrenophora teres f. teres</i> | | | | Kõrreliste pruunlaikus <i>Cochliobolus sativus</i> | | | |
|-------------------|--|------|---------|--------|---|------|---------|--------|
| | Viljandi | Võru | Kuusiku | Jõgeva | Viljandi | Võru | Kuusiku | Jõgeva |
| SWA 17525 (Assar) | 2,0 | 1,0 | 1,8 | 5,3 | 1,0 | 3,0 | 1,0 | 2,5 |
| SWA 17560 (Aron) | 2,5 | 1,0 | 1,8 | 5,5 | 1,0 | 3,0 | 1,0 | 3,5 |
| SWA 17575 (Arvid) | 2,8 | 1,0 | 2,0 | 5,3 | 1,0 | 3,0 | 1,0 | 2,5 |
| Brage* | 2,8 | 1,0 | 2,0 | 5,3 | 1,0 | 3,0 | 1,0 | 3,3 |
| Wolmari* | 2,0 | 1,5 | 2,0 | 5,3 | 1,0 | 3,0 | 1,0 | 2,5 |

| Sort Variety | Kõrreliste jahukaste <i>Blumeria graminis</i> | | | | Äärislaikus <i>Rhynchosporium secalis</i> | | | |
|-------------------|--|------|---------|--------|--|------|---------|--------|
| | Viljandi | Võru | Kuusiku | Jõgeva | Viljandi | Võru | Kuusiku | Jõgeva |
| SWA 17525 (Assar) | 2,3 | 6,5 | 5,8 | 8,0 | 1,0 | 1,5 | 1,0 | 1,0 |
| SWA 17560 (Aron) | 2,8 | 5,0 | 2,0 | 7,3 | 1,0 | 1,0 | 1,0 | 1,0 |
| SWA 17575 (Arvid) | 2,3 | 5,3 | 2,5 | 7,5 | 1,0 | 1,0 | 1,0 | 1,0 |
| Brage* | 2,0 | 6,0 | 3,0 | 7,8 | 1,0 | 1,5 | 1,0 | 1,0 |
| Wolmari* | 1,5 | 6,3 | 2,0 | 7,8 | 1,0 | 1,5 | 1,0 | 1,0 |

* standardsort / standard variety

KAER / OAT

Avena sativa L.

Kaera sortide tunnustamine 2022*

| Sort | Pind, ha | Sort | Pind, ha | Sort | Pind, ha |
|----------|----------|-----------------|----------|----------|----------|
| Armani | 156,87 | Donna | 63,58 | Montrose | 32,10 |
| Kalle | 126,92 | Ivory | 63,16 | liris | 30,90 |
| Meeri | 107,37 | Herkules Baltic | 59,63 | Guld | 22,47 |
| Symphony | 96,16 | Caddy | 52,42 | Avenue | 11,89 |
| Niklas | 92,36 | Peppi | 52,16 | Jaak | 9,76 |
| Apollon | 88,90 | Castor | 46,75 | Inka | 9,37 |
| Kusta | 77,30 | Galant | 45,00 | Avanti | 5,54 |
| Matty | 69,14 | | | | |

* Vastavalt PTA põldtunnustamise andmetele / according to AFB field inspection data

Katse agrotehnika / Agrotechnics of the trial 2022

| VILJANDI | VÖRU | KUUSIKU | JÕGEVA |
|----------|------|---------|--------|
|----------|------|---------|--------|

Mullaliik / Soil

| | | | |
|-------|----|----|----|
| LP(g) | LP | Kr | KI |
|-------|----|----|----|

Eelvili / Previous crop

| | | | |
|----------------------------|------------------------|-----------------------------------|-------------------------------|
| suvivikk / common vetch | peakapsas / cabbage | taliraps / winter oilseed rape | punane ristik / red clover |
|----------------------------|------------------------|-----------------------------------|-------------------------------|

Külvikuupäev / Sowing date

| | | | |
|------------|------------|------------|------------|
| 03.05.2022 | 05.05.2022 | 05.05.2022 | 29.04.2022 |
|------------|------------|------------|------------|

Külvinorm / Sowing rate: 500 id.tera/m² / germinating seeds per m²

Väetis (TA kg/ha); väetamise aeg / Fertilizer - level of N-P-K; Time of fertilization

| N | P | K | S | mikrod | N | P | K | S | mikrod | N | P | K | S | mikrod | N | P | K | S | mikrod |
|-----|----|----|----|-----------------|----|----|----|----|-----------------|----|----|----|----|--------|----|----|----|---|-------------------|
| | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | |
| 72 | 19 | 43 | 10 | B-0,08; Mg-4 | 72 | 19 | 43 | 10 | B-0,08; Mg-4 | 56 | 24 | 70 | 10 | B-0,08 | 60 | 16 | 36 | 9 | B-0,07; Mg-3,3 |
| | | | | | | | | | | | | | | | | | | | |
| 41 | | | 6 | | 26 | | | 13 | | 41 | | | 6 | | | | | | |
| | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | |
| 113 | 19 | 43 | 16 | Kokku | 98 | 19 | 43 | 23 | Kokku | 97 | 24 | 70 | 16 | Kokku | 60 | 16 | 36 | 9 | Kokku |

Taimekaitse: (norm l/ha, töötl. kuupäev) / Plant protection (litre per hectare, date of the treatment)

| VILJANDI | VÕRU | KUUSIKU | JÕGEVA |
|--|-------------------------|---------------------|----------------------------------|
| Puhtimine / Seed treatment - Vibrance Pro 2,0 l/t seemnete kohta / 2,0 l per 1 t seeds | | | |
| 01.06.2022 | 01.06.2022 | 30.05.2022 | 01.06.2022 |
| Ariane S - 2,5 l/ha | Trimmer 50 SG - 15 g/ha | Ariane S - 2,0 l/ha | Granstar Preemia 50 SX - 20 g/ha |
| Balaya - 0,4 l/ha | | 06.06.2022 | |
| Flexity - 0,25 l/ha | MCPA - 1,5 l/ha | Ariane S - 2,0 l/ha | Primus - 80 ml/ha |
| 15.06.2022 | | | 20.06.2022 |
| 2,4 D Nufarm - 1,25 l/ha | | | Priaxor - 0,8 l/ha |
| 20.06.2022 | | | |
| Revytrex - 1,0 l/ha | | | |

Kaera katseandmed

| Sort Variety | Arvestuslik saak, kg/ha Yield, kg/ha | | | | | | | |
|-----------------------------|---|-----|-------|-----|---------|-----|--------|-----|
| | Viljandi | | Võru | | Kuusiku | | Jõgeva | |
| | kg/ha | % | kg/ha | % | kg/ha | % | kg/ha | % |
| SW 151206 | 4869 | 118 | 9045 | 96 | 6230 | 141 | 10553 | 106 |
| SW 151314 (Avaus) | 3942 | 95 | 8854 | 94 | 6298 | 142 | 10399 | 104 |
| WPB 13W685-01 (WPB Oskar) | 3973 | 96 | 9520 | 101 | 4950 | 112 | 10247 | 103 |
| WPB 14W885-01 (WPB Jubilee) | 4248 | 103 | 9368 | 100 | 4972 | 112 | 10187 | 102 |
| Apollon* | 4123 | 100 | 9784 | 100 | 4733 | 100 | 10065 | 100 |
| Symphony* | 4162 | | 9001 | | 4131 | | 9874 | |
| PD5% (LSD) | 855 | | 599 | | 866 | | 370 | |

Jätukatse / postregistration

| | | | | | | | | |
|------------|------|-----|------|-----|------|-----|-------|-----|
| Caddy | 4169 | 101 | 9833 | 105 | 5679 | 128 | 10665 | 107 |
| WPB Mohair | 3492 | 84 | 9570 | 102 | 5097 | 115 | 9946 | 100 |
| Apollon* | 4123 | 100 | 9784 | 100 | 4733 | 100 | 10065 | 100 |
| Symphony* | 4162 | | 9001 | | 4131 | | 9874 | |
| PD5% (LSD) | 484 | | 385 | | 967 | | 432 | |

* standardsort / standard variety

| Sort Variety | Proteiin kuivaines, % Protein d.m, % | | | | Mahukaal, g/l Volume weight, g/l | | | |
|-----------------------------|---|------|---------|--------|-------------------------------------|------|---------|--------|
| | Viljandi | Võru | Kuusiku | Jõgeva | Viljandi | Võru | Kuusiku | Jõgeva |
| SW 151206 | 13,5 | 12,2 | 12,5 | 11,9 | 448 | 458 | 500 | 491 |
| SW 151314 (Avaus) | 14,4 | 12,9 | 13,7 | 12,4 | 450 | 469 | 517 | 511 |
| WPB 13W685-01 (WPB Oskar) | 14,0 | 12,5 | 14,0 | 12,4 | 429 | 500 | 500 | 524 |
| WPB 14W885-01 (WPB Jubilee) | 12,7 | 11,4 | 13,3 | 11,0 | 484 | 498 | 515 | 526 |
| Apollon* | 13,4 | 12,3 | 13,3 | 11,8 | 427 | 477 | 525 | 514 |
| Symphony* | 13,8 | 12,1 | 13,7 | 12,2 | 439 | 469 | 489 | 507 |

Jätukukitse / postregistration

| | | | | | | | | |
|------------|------|------|------|------|-----|-----|-----|-----|
| Caddy | 13,5 | 12,4 | 12,6 | 11,9 | 444 | 468 | 500 | 512 |
| WPB Mohair | 13,6 | 12,3 | 12,8 | 11,6 | 366 | 478 | 510 | 507 |
| Apollon* | 13,4 | 12,3 | 13,3 | 11,8 | 427 | 477 | 525 | 514 |
| Symphony* | 13,8 | 12,1 | 13,7 | 12,2 | 439 | 469 | 489 | 507 |

| Sort Variety | 1000 tera mass, g 1000 kernel weight, g | | | | Sõklaskus, % Contents of husk, % | | | |
|-----------------------------|--|------|---------|--------|-------------------------------------|------|---------|--------|
| | Viljandi | Võru | Kuusiku | Jõgeva | Viljandi | Võru | Kuusiku | Jõgeva |
| SW 151206 | 24,2 | 30,4 | 34,4 | 29,1 | 31,8 | 23,7 | 23,0 | 23,7 |
| SW 151314 (Avaus) | 26,4 | 31,1 | 35,6 | 30,2 | 33,1 | 25,3 | 23,7 | 23,9 |
| WPB 13W685-01 (WPB Oskar) | 28,1 | 36,9 | 37,7 | 37,6 | 36,4 | 26,3 | 24,6 | 25,1 |
| WPB 14W885-01 (WPB Jubilee) | 27,2 | 28,8 | 34,7 | 29,2 | 25,4 | 22,8 | 22,9 | 23,3 |
| Apollon* | 31,5 | 39,2 | 37,2 | 38,1 | 35,4 | 23,4 | 33,0 | 23,3 |
| Symphony* | 30,3 | 35,1 | 33,5 | 36,1 | 34,7 | 25,3 | 30,3 | 25,2 |

Jätukukitse / postregistration

| | | | | | | | | |
|------------|------|------|------|------|------|------|------|------|
| Caddy | 27,4 | 33,1 | 34,9 | 32,7 | 31,3 | 25,9 | 26,3 | 25,1 |
| WPB Mohair | 24,4 | 38,8 | 36,4 | 37,8 | 33,4 | 24,6 | 24,9 | 24,6 |
| Apollon* | 31,5 | 39,2 | 37,2 | 38,1 | 35,4 | 23,4 | 33,0 | 23,3 |
| Symphony* | 30,3 | 35,1 | 33,5 | 36,1 | 34,7 | 25,3 | 30,3 | 25,2 |

* standardsort / standard variety

| Sort Variety | Taimede kõrgus, cm Height of plants, cm | | | | Lamandumine / Lodging, 1-9 p (1= ei lamandu/not lodged) | | | |
|-----------------------------|--|------|---------|--------|---|------|---------|--------|
| | Viljandi | Võru | Kuusiku | Jõgeva | Viljandi | Võru | Kuusiku | Jõgeva |
| SW 151206 | 65 | 107 | 78 | 99 | 1,0 | 1,0 | 1,0 | 1,0 |
| SW 151314 (Avaus) | 65 | 118 | 83 | 102 | 1,0 | 1,5 | 1,0 | 1,0 |
| WPB 13W685-01 (WPB Oskar) | 69 | 116 | 76 | 100 | 1,0 | 1,0 | 1,0 | 1,0 |
| WPB 14W885-01 (WPB Jubilee) | 63 | 119 | 71 | 86 | 1,0 | 1,0 | 1,0 | 1,0 |
| Apollon* | 69 | 116 | 72 | 103 | 1,0 | 1,0 | 1,0 | 1,0 |
| Symphony* | 67 | 122 | 77 | 109 | 1,0 | 1,0 | 1,0 | 1,0 |

Jätukukitse / postregistration

| | | | | | | | | |
|------------|----|-----|----|-----|-----|-----|-----|-----|
| Caddy | 65 | 116 | 80 | 97 | 1,0 | 1,0 | 1,0 | 1,0 |
| WPB Mohair | 66 | 119 | 84 | 101 | 1,0 | 1,0 | 1,0 | 1,0 |
| Apollon* | 69 | 116 | 72 | 103 | 1,0 | 1,0 | 1,0 | 1,0 |
| Symphony* | 67 | 122 | 77 | 109 | 1,0 | 1,0 | 1,0 | 1,0 |

| Sort Variety | Kasvuaeg, päeva Growing period, days | | | |
|-----------------------------|---|------|---------|--------|
| | Viljandi | Võru | Kuusiku | Jõgeva |
| SW 151206 | 87 | 90 | 88 | 100 |
| SW 151314 (Avaus) | 87 | 88 | 89 | 99 |
| WPB 13W685-01 (WPB Oskar) | 87 | 88 | 90 | 98 |
| WPB 14W885-01 (WPB Jubilee) | 87 | 88 | 90 | 99 |
| Apollon* | 86 | 89 | 90 | 99 |
| Symphony* | 87 | 89 | 90 | 99 |

Jätukukitse / postregistration

| | | | | |
|------------|----|----|----|----|
| Caddy | 87 | 89 | 91 | 99 |
| WPB Mohair | 87 | 88 | 90 | 99 |
| Apollon* | 86 | 89 | 90 | 99 |
| Symphony* | 87 | 89 | 90 | 99 |

* standardsort / standard variety

| Sort Variety | Haigused / Diseases, 1-9 p (1=nakkus puudub/not infected) | | | | | | | |
|-----------------------------|--|------|---------|--------|---|------|---------|--------|
| | Kaera-kroonrooste <i>Puccinia coronata</i> | | | | Kaera-pruunlaiksus <i>Pyrenophora avenae</i> | | | |
| | Viljandi | Võru | Kuusiku | Jõgeva | Viljandi | Võru | Kuusiku | Jõgeva |
| SW 151206 | 2,8 | 1,0 | 1,8 | 5,5 | 2,8 | 3,0 | 3,0 | 4,8 |
| SW 151314 (Avaus) | 2,5 | 1,0 | 2,8 | 6,3 | 2,8 | 2,0 | 3,0 | 5,0 |
| WPB 13W685-01 (WPB Oskar) | 2,8 | 1,0 | 2,0 | 6,0 | 2,8 | 4,0 | 2,8 | 5,0 |
| WPB 14W885-01 (WPB Jubilee) | 2,5 | 1,0 | 2,0 | 6,0 | 2,5 | 2,0 | 2,0 | 4,5 |
| Apollon* | 2,3 | 1,0 | 2,3 | 5,5 | 3,0 | 2,0 | 2,8 | 4,8 |
| Symphony* | 2,3 | 1,0 | 2,5 | 6,3 | 2,5 | 3,0 | 2,8 | 5,0 |

Jätkukatse / postregistration

| | | | | | | | | |
|------------|-----|-----|-----|-----|-----|-----|-----|-----|
| Caddy | 2,0 | 1,0 | 2,5 | 7,3 | 3,0 | 2,0 | 2,5 | 5,3 |
| WPB Mohair | 2,8 | 1,0 | 2,5 | 6,5 | 3,0 | 2,0 | 2,3 | 5,0 |
| Apollon* | 2,3 | 1,0 | 2,3 | 5,5 | 3,0 | 2,0 | 2,8 | 4,8 |
| Symphony* | 2,3 | 1,0 | 2,5 | 6,3 | 2,5 | 3,0 | 2,8 | 5,0 |

* standardsort / standard variety

HERNES / PEA

Pisum sativum

Herne sortide tunnustamine 2022*

| Sort | Pind, ha | Sort | Pind, ha | Sort | Pind, ha |
|------------|----------|-----------|----------|-----------|----------|
| Bagoo | 418,56 | Navarro | 124,12 | Salamanca | 54,45 |
| Astronaute | 325,35 | Orchestra | 123,20 | Symfony | 52,95 |
| Ingrid | 251,68 | Rocket | 110,69 | Ostinato | 25,11 |
| Eso | 178,05 | Alvesta | 100,69 | Skol | 14,58 |
| Respect | 152,96 | Lacross | 71,08 | Mehis | 1,45 |
| Aurelia | 143,76 | | | | |

* Vastavalt PTA põldtunnustamise andmetele / according to AFB field inspection data

Katse agrotehnika / Agrotechnics of the trial 2022

| VILJANDI | VÕRU |
|----------------------------|---------------------|
| Mullaliik / Soil | |
| LP | LP |
| Eelvil / Previous crop | |
| talinisu / winter wheat | peakapsas / cabbage |
| Külvikuupäev / Sowing date | |
| 26.04.2022 | 29.04.2022 |

Külvinorm / Sowing rate: 120 id.tera/m² / germinating seeds per m²

Väetis (TA kg/ha); väetamise aeg / Fertilizer - level of N-P-K; Time of fertilization

| N | P | K | S | mikrod | N | P | K | S | mikrod |
|--|----|----|---|--------|------------|----|----|---|--------------|
| 20.04.2022 | | | | | 24.04.2022 | | | | |
| 24 | 26 | 75 | 6 | Mg-2 | 36 | 10 | 22 | 5 | Mg-2; B-0,04 |
| 30.05.2022 | | | | | | | | | |
| Profi Liblikõielised - 1,0 l/ha + Phylgreen Boor-Mo - 0,5 l/ha + Lebosol Räni - 0,2 l/ha | | | | | | | | | |
| 20.06.2022 | | | | | | | | | |
| Detera B+Mo - 1,5 l/ha | | | | | | | | | |
| 01.07.2022 | | | | | | | | | |
| Profi liblikõielised - 2,0 l/ha | | | | | | | | | |

Taimkaitse: (norm l/ha, tööt. kuupäev) / Plant protection (litre per hectare, date of the treatment)

| | |
|--|---|
| 28.04.2022 | 05.05.2022 |
| Fenix - 3,0 l/ha | Fenix - 3,0 l/ha |
| 06.06.2022 | 07.07.2022 |
| Corum+Dash - 1,25+1,0 l/ha | Propulse - 0,8 l/ha + Mavrik - 0,2 l/ha |
| 20.06.2022 | |
| Decis Mega - 0,15 l/ha + Targa Super - 0,8 l/ha + Pictor Avtive - 1,0 l/ha | |
| 01.07.2022 | |
| Cyperkill - 0,05 l/ha | |

Herne katseandmed

| Sort Variety | Arvestuslik saak, kg/ha Yield, kg/ha | | | |
|----------------------------|---|-----|-------|-----|
| | Viljandi | | Võru | |
| | kg/ha | % | kg/ha | % |
| NOS311-06-046/3 (Bellanos) | 2525 | 102 | 3603 | 80 |
| RLPY151024 | 2620 | 106 | 4670 | 104 |
| RLPY180580 | 2291 | 93 | 4819 | 107 |
| Alvesta* | 2470 | 100 | 4286 | 100 |
| Astronaute* | 2463 | | 4716 | |
| PD5% (LSD) | 191 | | 205 | |

Jätukutse / postregistration

| | | | | |
|-------------|------|-----|------|-----|
| Orchestra | 2421 | 98 | 4124 | 92 |
| Symbios | 2755 | 112 | 5322 | 118 |
| Alvesta* | 2470 | 100 | 4286 | 100 |
| Astronaute* | 2463 | | 4716 | |
| PD5% (LSD) | 132 | | 272 | |

| Sort Variety | Proteiin k.a, % Protein d.m, % | | 1000 tera mass, g 1000 kernel weight, g | |
|-----------------|-----------------------------------|------|--|------|
| | Viljandi | Võru | Viljandi | Võru |
| | NOS311-06-046/3 (Bellanos) | 22,1 | 24,7 | 197 |
| RLPY151024 | 22,7 | 25,4 | 237 | 243 |
| RLPY180580 | 23,5 | 24,8 | 259 | 274 |
| Alvesta* | 22,4 | 24,4 | 244 | 243 |
| Astronaute* | 23,0 | 25,4 | 231 | 237 |

Jätukutse / postregistration

| | | | | |
|-------------|------|------|-----|-----|
| Orchestra | 23,3 | 24,5 | 243 | 273 |
| Symbios | 23,0 | 26,8 | 233 | 272 |
| Alvesta* | 22,4 | 24,4 | 244 | 243 |
| Astronaute* | 23,0 | 25,4 | 231 | 237 |

* standardsort / standard variety

| Sort Variety | Kasvuperiood, Growing period, päeva / days | | Taimede kõrgus, Height of plants, cm | | Seisukindlus, Lodging resist., 1-9 p (1=halb/bad) | |
|----------------------------|--|------|--|------|---|------|
| | Viljandi | Võru | Viljandi | Võru | Viljandi | Võru |
| NOS311-06-046/3 (Bellanos) | 100 | 93 | 59 | 71 | 7,0 | 5,0 |
| RLPY151024 | 100 | 96 | 55 | 74 | 7,0 | 5,0 |
| RLPY180580 | 100 | 99 | 53 | 65 | 7,0 | 5,0 |
| Alvesta* | 100 | 91 | 51 | 73 | 7,0 | 5,0 |
| Astronaute* | 100 | 94 | 52 | 74 | 7,0 | 5,0 |

Jätukukitse / postregistration

| | | | | | | |
|-------------|-----|----|----|----|-----|-----|
| Orchestra | 100 | 98 | 51 | 66 | 7,0 | 5,0 |
| Symbios | 100 | 98 | 59 | 82 | 7,0 | 5,0 |
| Alvesta* | 100 | 91 | 51 | 73 | 7,0 | 5,0 |
| Astronaute* | 100 | 94 | 52 | 74 | 7,0 | 5,0 |

| Sort Variety | Valmimise viibimine, Delaying of maturing, 1-9 p (1=ei esine/absent) | | Lõhenemine, varisemine, kaunas idanemine, Cleavage, falling off, germination in pod, 1-9 p (1=ei esine/absent) | |
|----------------------------|--|------|--|------|
| | Viljandi | Võru | Viljandi | Võru |
| NOS311-06-046/3 (Bellanos) | 5,0 | 3,0 | 1,0 | 1,0 |
| RLPY151024 | 4,0 | 3,0 | 1,0 | 1,0 |
| RLPY180580 | 4,0 | 5,0 | 1,0 | 1,0 |
| Alvesta* | 4,0 | 1,0 | 1,0 | 1,0 |
| Astronaute* | 4,0 | 1,0 | 1,0 | 1,0 |

Jätukukitse / postregistration

| | | | | |
|-------------|-----|-----|-----|-----|
| Orchestra | 4,0 | 7,0 | 1,0 | 1,0 |
| Symbios | 4,0 | 7,0 | 1,0 | 1,0 |
| Alvesta* | 4,0 | 1,0 | 1,0 | 1,0 |
| Astronaute* | 4,0 | 1,0 | 1,0 | 1,0 |

* standardsort / standard variety

Haigused, kahjurid / Diseases, pests, 1-9 p (1=kahjustus puudub/not infected)

| Sort Variety | Laikpõletik hernel <i>Mycosphaerella pinodes</i> | | Hernemähkur <i>Laspeyresia nigricana</i> | |
|----------------------------|---|------|---|------|
| | Viljandi | Võru | Viljandi | Võru |
| NOS311-06-046/3 (Bellanos) | 1,0 | 2,0 | 6,0 | 5,5 |
| RLPY151024 | 1,0 | 2,0 | 6,0 | 7,0 |
| RLPY180580 | 1,0 | 2,0 | 6,0 | 5,0 |
| Alvesta* | 1,0 | 2,0 | 6,0 | 6,5 |
| Astronaute* | 1,0 | 2,0 | 6,0 | 5,0 |

Jätukutse / postregistration

| | | | | |
|-------------|-----|-----|-----|-----|
| Orchestra | 1,0 | 2,0 | 6,0 | 6,0 |
| Symbios | 1,0 | 2,0 | 6,0 | 5,0 |
| Alvesta* | 1,0 | 2,0 | 6,0 | 6,5 |
| Astronaute* | 1,0 | 2,0 | 6,0 | 5,0 |

* standardsort / standard variety

PÕLDUBA / BEAN

Vicia faba

Põldoa sortide tunnustamine 2022*

| Sort | Pind, ha | Sort | Pind, ha | Sort | Pind, ha |
|---------|----------|---------|----------|---------|----------|
| Fanfare | 135,90 | Daisy | 90,91 | Jõgeva | 27,79 |
| Laura | 130,47 | Fuego | 66,49 | Boxer | 19,62 |
| Lynx | 129,47 | Louhi | 56,50 | Tiffany | 8,60 |
| Isabell | 96,50 | Trumpet | 50,80 | Helbi | 4,70 |

* Vastavalt PTA põldtunnustamise andmetele / according to AFB field inspection data

Katse agrotehnika / Agrotechnics of the trial 2022

| VILJANDI | VÖRU |
|---|---------------------|
| Mullaliik / Soil | |
| LP | LP |
| Eelvil / Previous crop | |
| talinisu / winter wheat | peakapsas / cabbage |
| Külvikuupäev / Sowing date | |
| 26.04.2022 | 29.04.2022 |
| Külvinorm / Sowing rate: 50 id.tera/m ² / germinating seeds per m ² | |

Väetis (TA kg/ha); väetamise aeg / Fertilizer - level of N-P-K; Time of fertilization

| N | P | K | S | mikrod | N | P | K | S | mikrod |
|---------------------------------|----|----|---|--------|------------|----|----|---|--------------|
| 20.04.2022 | | | | | 24.04.2022 | | | | |
| 24 | 26 | 75 | 6 | Mg-2 | 36 | 10 | 22 | 5 | Mg-2; B-0,04 |
| 30.05.2022 | | | | | | | | | |
| Profi Liblikõielised - 1,0 l/ha | | | | | | | | | |
| Phylgreen Boor-Mo - 0,5 l/ha | | | | | | | | | |
| Lebosol Räni - 0,2 l/ha | | | | | | | | | |
| 20.06.2022 | | | | | | | | | |
| Detera B+Mo - 1,5 l/ha | | | | | | | | | |
| 01.07.2022 | | | | | | | | | |
| Profi liblikõielised - 2,0 l/ha | | | | | | | | | |

Taimkaitse: (norm l/ha, tööt. kuupäev) / Plant protection (litre per hectare, date of the treatment)

| | |
|----------------------------|---------------------|
| 28.04.2022 | 05.05.2022 |
| Fenix - 3,0 l/ha | Fenix - 3,0 l/ha |
| 06.06.2022 | 07.07.2022 |
| Corum+Dash - 1,25+1,0 l/ha | Propulse - 0,8 l/ha |
| 20.06.2022 | Mavrik - 0,2 l/ha |
| Decis Mega - 0,15 l/ha | |
| Targa Super - 0,8 l/ha | |
| Pictor Avtive - 1,0 l/ha | |
| 01.07.2022 | |
| Cyperkill - 0,05 l/ha | |

Põldoa katseandmed

| Sort Variety | Arvestuslik saak, kg/ha Yield, kg/ha | | | |
|-------------------|---|-----|-------|-----|
| | Viljandi | | Võru | |
| | kg/ha | % | kg/ha | % |
| PHP 15-3 (Capri) | 3343 | 92 | 7293 | 97 |
| PHP 15-4 (Apollo) | 2894 | 80 | 7586 | 101 |
| PHP 20-32.1 | 3186 | 88 | 7113 | 95 |
| PHP 20-35.1 | 2953 | 81 | 7122 | 95 |
| PHP 20-36 | 3453 | 95 | 7387 | 98 |
| PHP 20-39.1 | 3441 | 95 | 7823 | 104 |
| PHP 20-42 | 3568 | 98 | 7811 | 104 |
| RLS 67041 (Macho) | 3377 | 93 | 6906 | 92 |
| RLS217101 | 3569 | 98 | 7365 | 98 |
| RLS97027 (Genius) | 4044 | 111 | 7753 | 103 |
| RLS97028 (Futura) | 2653 | 73 | 7110 | 94 |
| Fanfare* | 3408 | 100 | 7777 | 100 |
| Isabell* | 3856 | | 7276 | |
| PD5% (LSD) | 389 | | 712 | |

Jätukatse / postregistration

| | | | | |
|------------|------|-----|------|-----|
| Birgit | 3218 | 89 | 7531 | 100 |
| Bolivia | 2840 | 78 | 6049 | 80 |
| Callas | 2861 | 79 | 7094 | 94 |
| Daisy | 3169 | 87 | 7180 | 95 |
| Protina | 3241 | 89 | 7354 | 98 |
| Stella | 3148 | 87 | 7435 | 99 |
| Synergy | 2996 | 82 | 7596 | 101 |
| Fanfare* | 3408 | 100 | 7777 | 100 |
| Isabell* | 3856 | | 7276 | |
| PD5% (LSD) | 438 | | 615 | |

* standardsort / standard variety

| Sort Variety | Kasvuperiood, päeva Growing period, days | | Valmimise viibimine, Delaying of maturing, 1-9 palli/points (1=ei esine/absent) | |
|-------------------|---|------|---|------|
| | Viljandi | Võru | Viljandi | Võru |
| PHP 15-3 (Capri) | 108 | 112 | 1,0 | 1,0 |
| PHP 15-4 (Apollo) | 109 | 115 | 1,0 | 1,0 |
| PHP 20-32.1 | 109 | 113 | 1,3 | 1,0 |
| PHP 20-35.1 | 109 | 112 | 1,8 | 1,0 |
| PHP 20-36 | 109 | 111 | 1,8 | 1,0 |
| PHP 20-39.1 | 109 | 114 | 1,3 | 1,0 |
| PHP 20-42 | 108 | 112 | 1,0 | 1,0 |
| RLS 67041 (Macho) | 109 | 115 | 1,0 | 1,0 |
| RLS217101 | 109 | 112 | 1,8 | 1,0 |
| RLS97027 (Genius) | 109 | 113 | 1,0 | 1,0 |
| RLS97028 (Futura) | 109 | 113 | 1,0 | 1,0 |
| Fanfare* | 108 | 115 | 1,0 | 1,0 |
| Isabell* | 108 | 114 | 1,0 | 1,0 |

Jätukutse / postregistration

| | | | | |
|----------|-----|-----|-----|-----|
| Birgit | 108 | 112 | 1,0 | 1,0 |
| Bolivia | 108 | 116 | 1,5 | 1,0 |
| Callas | 108 | 112 | 1,0 | 1,0 |
| Daisy | 108 | 114 | 1,0 | 1,0 |
| Protina | 108 | 113 | 1,0 | 1,0 |
| Stella | 108 | 112 | 1,0 | 1,0 |
| Synergy | 108 | 112 | 1,0 | 1,0 |
| Fanfare* | 108 | 115 | 1,0 | 1,0 |
| Isabell* | 108 | 114 | 1,0 | 1,0 |

* standardsort / standard variety

| Sort Variety | 1000 tera mass, 1000 kernel weight, g | | Proteiin k.a, Protein d.m, % | | Tanniinide sisaldus, Content of tannins, % | |
|-------------------|---|------|------------------------------------|------|--|-------|
| | Viljandi | Võru | Viljandi | Võru | Viljandi | Võru |
| PHP 15-3 (Capri) | 587 | 583 | 34,7 | 34,7 | 0,215 | 0,221 |
| PHP 15-4 (Apollo) | 620 | 625 | 35,1 | 34,8 | 0,240 | 0,236 |
| PHP 20-32.1 | 568 | 604 | 33,5 | 34,7 | 0,220 | 0,204 |
| PHP 20-35.1 | 607 | 623 | 33,7 | 33,7 | 0,261 | 0,215 |
| PHP 20-36 | 606 | 582 | 34,1 | 33,6 | 0,238 | 0,223 |
| PHP 20-39.1 | 592 | 626 | 33,6 | 35,2 | 0,229 | 0,233 |
| PHP 20-42 | 606 | 600 | 34,3 | 34,2 | 0,208 | 0,212 |
| RLS 67041 (Macho) | 665 | 629 | 29,7 | 30,1 | 0,267 | 0,312 |
| RLS217101 | 591 | 577 | 35,5 | 35,1 | 0,477 | 0,187 |
| RLS97027 (Genius) | 604 | 581 | 32,1 | 31,4 | 0,213 | 0,225 |
| RLS97028 (Futura) | 586 | 601 | 33,1 | 33,6 | 0,197 | 0,222 |
| Fanfare* | 598 | 589 | 34,1 | 34,2 | 0,273 | 0,231 |
| Isabell* | 521 | 556 | 33,1 | 35,1 | 0,278 | 0,286 |

Jätukutse / postregistration

| | | | | | | |
|----------|-----|-----|------|------|-------|-------|
| Birgit | 255 | 535 | 32,5 | 35,2 | 0,228 | 0,228 |
| Bolivia | 538 | 535 | 34,5 | 34,6 | 0,267 | 0,267 |
| Callas | 609 | 659 | 33,7 | 35,0 | 0,231 | 0,231 |
| Daisy | 589 | 595 | 33,6 | 34,4 | 0,215 | 0,215 |
| Protina | 588 | 572 | 35,6 | 34,8 | 0,205 | 0,205 |
| Stella | 601 | 608 | 33,8 | 32,9 | 0,221 | 0,221 |
| Synergy | 560 | 551 | 33,5 | 34,2 | 0,158 | 0,158 |
| Fanfare* | 598 | 589 | 34,1 | 34,2 | 0,273 | 0,231 |
| Isabell* | 521 | 556 | 33,1 | 35,1 | 0,278 | 0,286 |

* standardsort / standard variety

| Sort Variety | Taimede kõrgus, cm Height of plants, cm | | Seisukindlus, Lodging resistance, 1-9 p (1=halb/bad) | | Alum. kaunte kinnit.kõrgus, cm Attachment height of lower pods, cm | |
|-------------------|--|------|--|------|---|------|
| | Viljandi | Võru | Viljandi | Võru | Viljandi | Võru |
| PHP 15-3 (Capri) | 63 | 111 | 9,0 | 9,0 | 35 | 41 |
| PHP 15-4 (Apollo) | 62 | 116 | 9,0 | 9,0 | 32 | 42 |
| PHP 20-32.1 | 70 | 116 | 9,0 | 9,0 | 38 | 44 |
| PHP 20-35.1 | 69 | 117 | 9,0 | 9,0 | 37 | 48 |
| PHP 20-36 | 63 | 113 | 9,0 | 9,0 | 39 | 45 |
| PHP 20-39.1 | 70 | 122 | 9,0 | 9,0 | 41 | 49 |
| PHP 20-42 | 67 | 119 | 9,0 | 9,0 | 39 | 47 |
| RLS 67041 (Macho) | 64 | 109 | 9,0 | 9,0 | 33 | 42 |
| RLS217101 | 69 | 112 | 9,0 | 9,0 | 40 | 45 |
| RLS97027 (Genius) | 64 | 118 | 9,0 | 9,0 | 38 | 43 |
| RLS97028 (Futura) | 67 | 117 | 9,0 | 9,0 | 42 | 46 |
| Fanfare* | 62 | 117 | 9,0 | 9,0 | 38 | 43 |
| Isabell* | 64 | 117 | 9,0 | 9,0 | 36 | 46 |

Jätukukitse / postregistration

| | | | | | | |
|----------|----|-----|-----|-----|----|----|
| Birgit | 62 | 121 | 9,0 | 9,0 | 40 | 47 |
| Bolivia | 56 | 109 | 9,0 | 9,0 | 34 | 38 |
| Callas | 67 | 110 | 9,0 | 9,0 | 39 | 50 |
| Daisy | 67 | 118 | 9,0 | 9,0 | 40 | 44 |
| Protina | 68 | 118 | 9,0 | 9,0 | 38 | 46 |
| Stella | 69 | 113 | 9,0 | 9,0 | 40 | 45 |
| Synergy | 69 | 109 | 9,0 | 9,0 | 39 | 46 |
| Fanfare* | 62 | 117 | 9,0 | 9,0 | 38 | 43 |
| Isabell* | 64 | 117 | 9,0 | 9,0 | 36 | 46 |

* standardsort / standard variety

| Sort Variety | Lõhenem., varisem., kaunas idanemine, Cleavage, falling off, germination in pod, 1-9 p (1=ei esine/absent) | | Haigused / Diseases, 1-9 p (1=nakkus puudub/not infected) | | | |
|-------------------|---|------|--|------|--|------|
| | | | Põldoa- šokolaadilaiksus <i>Botrytis fabae</i> | | Laikpõletik põldoal <i>Mycosphaerella pinodes</i> | |
| | Viljandi | Võru | Viljandi | Võru | Viljandi | Võru |
| PHP 15-3 (Capri) | 2,3 | 1,0 | 2,0 | 1,0 | 2,0 | 5,3 |
| PHP 15-4 (Apollo) | 1,3 | 1,0 | 2,0 | 1,0 | 2,0 | 2,5 |
| PHP 20-32.1 | 1,8 | 1,0 | 2,0 | 1,0 | 2,0 | 4,5 |
| PHP 20-35.1 | 1,5 | 1,0 | 2,0 | 1,0 | 2,0 | 5,5 |
| PHP 20-36 | 1,5 | 1,0 | 2,0 | 1,0 | 2,0 | 4,3 |
| PHP 20-39.1 | 1,0 | 1,0 | 2,0 | 1,0 | 2,0 | 3,0 |
| PHP 20-42 | 1,5 | 1,0 | 2,0 | 1,0 | 2,0 | 4,0 |
| RLS 67041 (Macho) | 3,0 | 1,0 | 2,0 | 1,0 | 2,0 | 2,3 |
| RLS217101 | 1,3 | 1,0 | 2,0 | 1,0 | 2,0 | 3,8 |
| RLS97027 (Genius) | 1,8 | 1,0 | 2,0 | 1,0 | 2,0 | 3,0 |
| RLS97028 (Futura) | 1,3 | 1,0 | 2,0 | 1,0 | 2,0 | 3,5 |
| Fanfare* | 1,3 | 1,0 | 2,0 | 1,0 | 2,0 | 4,0 |
| Isabell* | 2,0 | 1,0 | 2,0 | 1,0 | 2,0 | 2,5 |

Jätukutse / postregistration

| | | | | | | |
|----------|-----|-----|-----|-----|-----|-----|
| Birgit | 1,0 | 1,0 | 2,0 | 1,0 | 2,0 | 3,8 |
| Bolivia | 1,0 | 1,0 | 2,0 | 1,0 | 2,0 | 4,0 |
| Callas | 1,3 | 1,0 | 2,0 | 1,0 | 2,0 | 4,3 |
| Daisy | 1,0 | 1,0 | 2,0 | 1,0 | 2,0 | 3,5 |
| Protina | 2,5 | 1,0 | 2,0 | 1,0 | 2,0 | 4,3 |
| Stella | 2,0 | 1,0 | 2,0 | 1,0 | 2,0 | 4,8 |
| Synergy | 2,8 | 1,0 | 2,0 | 1,0 | 2,0 | 3,5 |
| Fanfare* | 1,3 | 1,0 | 2,0 | 1,0 | 2,0 | 4,0 |
| Isabell* | 2,0 | 1,0 | 2,0 | 1,0 | 2,0 | 2,5 |

* standardsort / standard variety

SUVIRAPS, SUVIRÜPS / SPRING OILSEED RAPE, SPRING TURNIP OILSEED RAPE

Brassica napus L. var. oleifera subvar. annua

Brassica rapa L. var. oleifera subvar. annua

Katse agrotehnika / Agrotechnics of the trial 2022

| VÖRU | KUUSIKU |
|-----------------------------------|-------------------------|
| Mullaliik / Soil | |
| LP | G _o |
| Eelvili / Previous crop | |
| peakapsa / cabbage | mustkesa / black fallow |
| Külvikuupäev / Sowing date | |
| 13.05.2022 | 13.05.2022 |

Külvinorm / Sowing rate, id.tera/m² / germinating seeds per m²
hübriidsordil / for hybrids - 65; liinsordil / for others - 100

Väetis (TA kg/ha); väetamise aeg / Fertilizer - level of N-P-K; Time of fertilization

| N | P | K | S | mikrod | N | P | K | S | mikrod |
|-------------------|----|----|----|-----------------|------------|----|----|----|----------------|
| 04.05.2022 | | | | | 10.05.2022 | | | | |
| 72 | 19 | 43 | 10 | Mg-4; B-0,08 | 90 | 24 | 54 | 13 | Mg-5; B-0,1 |
| 17.06.2022 | | | | | 07.06.2022 | | | | |
| 52 | | | 26 | | 52 | | | 26 | |
| 22.06.2022 | | | | | | | | | |
| Tradebor 2,0 l/ha | | | | | | | | | |
| 04.07.2022 | | | | | | | | | |
| 26 | | | 13 | | | | | | |
| 150 | 19 | 43 | 49 | Kokku | 142 | 24 | 54 | 39 | Kokku |

Taimkaitse: (norm l/ha, töötl. kuupäev) / Plant protection (litre per hectare, date of the treatment)

| | |
|------------------------------|---------------------------|
| 13.05.2022 | 16.05.2022 |
| Metazamix - 1,0 l/ha | Butisan Star - 2,0 l/ha |
| 26.05.2022 | 24.05.2022 |
| Cyperkill 500 EC - 0,05 l/ha | Mospilan 20 SG - 200 g/ha |
| 09.06.2022 | 10.06.2022 |
| Galera - 0,3 l/ha | Galera - 0,35 l/ha |
| 22.06.2022 | Decis - 0,15 l/ha |
| Mospilan 20 SG - 200 g/ha | 22.06.2022 |
| 30.07.2022 | Cantus Gold - 0,4 l/ha |
| Propulse - 1,0 l/ha | |

Suvirapsi katseandmed

| Sort Variety | Arvestuslik saak / Yield, kg/ha ja % st. keskmisest | | | | Kasvuperiood, päeva Growing period, days | |
|--------------------------|--|-----|---------|-----|---|---------|
| | Võru | | Kuusiku | | Võru | Kuusiku |
| | kg/ha | % | kg/ha | % | | |
| 1EN0033 | 1307 | 120 | 2158 | 74 | 127 | 119 |
| 1EN0034 | 855 | 79 | 2789 | 96 | 129 | 119 |
| 1EN0035 | 854 | 78 | 2319 | 80 | 126 | 119 |
| 2EN0036 | 965 | 89 | 2379 | 82 | 127 | 115 |
| DLE20822S11 (Lava) | 901 | 83 | 2473 | 85 | 128 | 119 |
| DLE21827S11 (Laika) | 1128 | 104 | 2576 | 89 | 127 | 116 |
| DLE21828S11 (Looping) | 1074 | 99 | 2396 | 83 | 126 | 120 |
| DLE21829S21 (Calina CL) | 1203 | 110 | 2065 | 71 | 127 | 118 |
| DLE21830S21 (Cascade CL) | 1068 | 98 | 2293 | 79 | 127 | 117 |
| DLE21831S21 (Carat CL) | 589 | 54 | 2190 | 75 | 127 | 116 |
| DLE22832S11 | 891 | 82 | 3192 | 110 | 126 | 116 |
| DLE22833S21 | 1101 | 101 | 2806 | 97 | 127 | 116 |
| DLE22834S21 | 693 | 64 | 2148 | 74 | 128 | 119 |
| DLE22835S21 | 624 | 57 | 2895 | 100 | 128 | 120 |
| LM B2918 | 577 | 53 | 2797 | 96 | 127 | 120 |
| LM B2919 | 759 | 70 | 3085 | 106 | 130 | 122 |
| LM B2920 | 1416 | 130 | 3100 | 107 | 127 | 121 |
| LM B2923 | 1074 | 99 | 3421 | 118 | 128 | 122 |
| SRH6180354 | 969 | 89 | 2436 | 84 | 132 | 119 |
| SRH6180463 | 835 | 77 | 2757 | 95 | 132 | 119 |
| Fenja* | 562 | 100 | 2649 | 100 | 128 | 119 |
| Kalla* | 1306 | | 3065 | | 126 | 120 |
| Lagoon* | 775 | | 3007 | | 127 | 118 |
| Sunder* | 1715 | | 2884 | | 129 | 117 |
| PD 5% (LSD) | 215 | | 479 | | | |

* standardsort / standard variety

| Sort Variety | Toorrasv k.a, % Raw fat %, d.m | | Proteiin k.a, % Protein %, d.m | |
|--------------------------|-----------------------------------|---------|-----------------------------------|---------|
| | Võru | Kuusiku | Võru | Kuusiku |
| 1EN0033 | 42,0 | 46,2 | 31,1 | 22,8 |
| 1EN0034 | 42,1 | 46,4 | 29,7 | 23,0 |
| 1EN0035 | 39,9 | 46,9 | 30,5 | 22,5 |
| 2EN0036 | 43,9 | 44,7 | 27,9 | 23,9 |
| DLE20822S11 (Lava) | 42,9 | 47,0 | 28,5 | 20,8 |
| DLE21827S11 (Laika) | 42,8 | 46,1 | 27,3 | 21,8 |
| DLE21828S11 (Looping) | 42,2 | 46,6 | 28,4 | 21,7 |
| DLE21829S21 (Calina CL) | 43,6 | 46,4 | 26,4 | 21,8 |
| DLE21830S21 (Cascade CL) | 39,5 | 44,9 | 26,9 | 22,8 |
| DLE21831S21 (Carat CL) | 41,2 | 43,5 | 26,8 | 25,1 |
| DLE22832S11 | 41,0 | 47,8 | 26,7 | 20,9 |
| DLE22833S21 | 40,5 | 46,7 | 26,8 | 21,6 |
| DLE22834S21 | 40,1 | 44,0 | 27,9 | 23,8 |
| DLE22835S21 | 41,7 | 45,9 | 28,8 | 22,2 |
| LM B2918 | 43,2 | 46,4 | 29,9 | 22,9 |
| LM B2919 | 43,9 | 46,0 | 27,5 | 23,1 |
| LM B2920 | 40,6 | 46,3 | 27,5 | 22,7 |
| LM B2923 | 42,8 | 45,3 | 27,1 | 23,4 |
| SRH6180354 | 43,0 | 44,3 | 29,8 | 22,8 |
| SRH6180463 | 40,5 | 45,4 | 26,9 | 22,7 |
| Fenja* | 42,6 | 47,7 | 31,0 | 21,1 |
| Kalla* | 43,9 | 46,8 | 27,7 | 22,3 |
| Lagoon* | 41,8 | 45,9 | 25,9 | 21,8 |
| Sunder* | 43,2 | 47,8 | 26,4 | 22,2 |

* standardsort / standard variety

| Sort Variety | 1000 tera mass, g 1000 kernel weight, g | | Glükosinolaadid, µmol/g Glycosinolates, µmol/g | |
|--------------------------|--|---------|---|---------|
| | Võru | Kuusiku | Võru | Kuusiku |
| 1EN0033 | 5,91 | 4,56 | 21,9 | 18,4 |
| 1EN0034 | 5,49 | 4,83 | 27,1 | 17,4 |
| 1EN0035 | 4,79 | 4,49 | 23,6 | 16,9 |
| 2EN0036 | 5,31 | 4,14 | 26,5 | 14,8 |
| DLE20822S11 (Lava) | 5,31 | 4,26 | 21,9 | 20,2 |
| DLE21827S11 (Laika) | 4,88 | 4,09 | 25,5 | 18,4 |
| DLE21828S11 (Looping) | 4,39 | 4,30 | 27,2 | 16,9 |
| DLE21829S21 (Calina CL) | 5,39 | 4,21 | 26,9 | 19,9 |
| DLE21830S21 (Cascade CL) | 4,68 | 4,97 | 33,7 | 16,0 |
| DLE21831S21 (Carat CL) | 5,18 | 4,53 | 21,8 | 19,1 |
| DLE22832S11 | 4,54 | 4,31 | 23,9 | 15,3 |
| DLE22833S21 | 4,91 | 5,22 | 22,9 | 16,2 |
| DLE22834S21 | 4,76 | 4,34 | 35,5 | 21,3 |
| DLE22835S21 | 5,88 | 4,37 | 24,7 | 16,1 |
| LM B2918 | 5,01 | 5,60 | 34,0 | 16,5 |
| LM B2919 | 5,10 | 4,33 | 25,1 | 18,9 |
| LM B2920 | 4,55 | 4,60 | 26,7 | 18,0 |
| LM B2923 | 5,02 | 4,01 | 23,3 | 16,2 |
| SRH6180354 | 5,97 | 4,60 | 28,0 | 19,0 |
| SRH6180463 | 5,06 | 4,18 | 29,1 | 19,1 |
| Fenja* | 5,78 | 4,66 | 30,3 | 14,3 |
| Kalla* | 5,35 | 4,17 | 26,0 | 17,2 |
| Lagoon* | 5,08 | 4,19 | 24,8 | 19,0 |
| Sunder* | 4,79 | 4,35 | 23,5 | 15,7 |

* standardsort / standard variety

| Sort Variety | Taimede kõrgus, cm Height of plants, cm | | Seisukindlus, Lodging resistance, 1-9 p (1=halb/bad) | |
|--------------------------|--|---------|--|---------|
| | Võru | Kuusiku | Võru | Kuusiku |
| 1EN0033 | 118 | 122 | 8,0 | 9,0 |
| 1EN0034 | 112 | 116 | 8,5 | 9,0 |
| 1EN0035 | 113 | 128 | 7,0 | 9,0 |
| 2EN0036 | 115 | 109 | 7,3 | 9,0 |
| DLE20822S11 (Lava) | 112 | 112 | 8,3 | 9,0 |
| DLE21827S11 (Laika) | 111 | 99 | 8,0 | 9,0 |
| DLE21828S11 (Looping) | 112 | 110 | 7,8 | 9,0 |
| DLE21829S21 (Calina CL) | 106 | 125 | 8,3 | 9,0 |
| DLE21830S21 (Cascade CL) | 105 | 118 | 8,3 | 9,0 |
| DLE21831S21 (Carat CL) | 108 | 99 | 7,8 | 9,0 |
| DLE22832S11 | 99 | 115 | 8,8 | 9,0 |
| DLE22833S21 | 113 | 110 | 7,8 | 9,0 |
| DLE22834S21 | 125 | 118 | 8,3 | 9,0 |
| DLE22835S21 | 112 | 116 | 7,8 | 9,0 |
| LM B2918 | 110 | 126 | 8,3 | 9,0 |
| LM B2919 | 107 | 113 | 8,3 | 9,0 |
| LM B2920 | 113 | 114 | 8,5 | 9,0 |
| LM B2923 | 121 | 119 | 8,5 | 9,0 |
| SRH6180354 | 109 | 114 | 9,0 | 9,0 |
| SRH6180463 | 110 | 111 | 8,8 | 9,0 |
| Fenja* | 110 | 105 | 8,5 | 9,0 |
| Kalla* | 112 | 110 | 7,8 | 9,0 |
| Lagoon* | 114 | 110 | 7,5 | 9,0 |
| Sunder* | 121 | 123 | 8,8 | 9,0 |

* standardsort / standard variety

| Sort Variety | Haigused / Diseases, 1-9 p (1=nakkus puudub / not infected) | | | |
|--------------------------|--|---------|---|---------|
| | Ristõieliste kuivlaiksus <i>Alternaria brassicae</i> | | Valgemädanik <i>Sclerotinia sclerotiorum</i> | |
| | Võru | Kuusiku | Võru | Kuusiku |
| 1EN0033 | 2,3 | 2,0 | 1,8 | 1,0 |
| 1EN0034 | 2,8 | 2,0 | 1,5 | 1,0 |
| 1EN0035 | 2,5 | 2,0 | 1,8 | 1,0 |
| 2EN0036 | 2,3 | 2,0 | 2,0 | 1,0 |
| DLE20822S11 (Lava) | 2,0 | 2,0 | 1,8 | 1,0 |
| DLE21827S11 (Laika) | 2,0 | 2,0 | 1,8 | 1,0 |
| DLE21828S11 (Looping) | 2,3 | 2,0 | 2,0 | 1,0 |
| DLE21829S21 (Calina CL) | 2,3 | 2,0 | 2,0 | 1,0 |
| DLE21830S21 (Cascade CL) | 2,0 | 2,0 | 1,5 | 1,0 |
| DLE21831S21 (Carat CL) | 2,8 | 2,0 | 1,8 | 1,0 |
| DLE22832S11 | 2,8 | 2,0 | 1,8 | 1,0 |
| DLE22833S21 | 2,0 | 2,0 | 1,8 | 1,0 |
| DLE22834S21 | 3,0 | 2,0 | 2,0 | 1,0 |
| DLE22835S21 | 2,0 | 2,0 | 2,0 | 1,0 |
| LM B2918 | 2,8 | 2,0 | 1,5 | 1,0 |
| LM B2919 | 2,8 | 2,0 | 1,5 | 1,0 |
| LM B2920 | 2,3 | 2,0 | 2,0 | 1,0 |
| LM B2923 | 2,0 | 2,0 | 2,3 | 1,0 |
| SRH6180354 | 2,5 | 2,0 | 2,0 | 1,0 |
| SRH6180463 | 2,5 | 2,0 | 1,5 | 1,0 |
| Fenja* | 2,3 | 2,0 | 2,0 | 1,0 |
| Kalla* | 2,3 | 2,0 | 2,3 | 1,0 |
| Lagoon* | 2,0 | 2,0 | 1,8 | 1,0 |
| Sunder* | 2,3 | 2,0 | 2,0 | 1,0 |

* standardsort / standard variety

| Sort Variety | Haigused / Diseases, 1-9 p (1=nakkus puudub / not infected) | | | |
|--------------------------|--|---------|--|---------|
| | Ristõieliste ebajahukaste <i>Peronospora brassicae</i> | | Vertitsilloosne närbumine <i>Verticillium longisporum</i> | |
| | Võru | Kuusiku | Võru | Kuusiku |
| 1EN0033 | 1,3 | 1,0 | 1,8 | 1,0 |
| 1EN0034 | 1,0 | 1,0 | 2,3 | 1,0 |
| 1EN0035 | 1,0 | 1,0 | 2,0 | 1,0 |
| 2EN0036 | 1,3 | 1,0 | 2,0 | 1,0 |
| DLE20822S11 (Lava) | 1,0 | 1,0 | 2,5 | 1,0 |
| DLE21827S11 (Laika) | 1,0 | 1,0 | 2,0 | 1,0 |
| DLE21828S11 (Looping) | 1,0 | 1,0 | 2,3 | 1,0 |
| DLE21829S21 (Calina CL) | 1,3 | 1,0 | 1,8 | 1,0 |
| DLE21830S21 (Cascade CL) | 1,3 | 1,0 | 2,0 | 1,0 |
| DLE21831S21 (Carat CL) | 1,3 | 1,0 | 2,0 | 1,0 |
| DLE22832S11 | 1,0 | 1,0 | 1,5 | 1,0 |
| DLE22833S21 | 1,5 | 1,0 | 1,8 | 1,0 |
| DLE22834S21 | 1,3 | 1,0 | 2,0 | 1,0 |
| DLE22835S21 | 1,3 | 1,0 | 1,8 | 1,0 |
| LM B2918 | 1,5 | 1,0 | 2,0 | 1,0 |
| LM B2919 | 1,3 | 1,0 | 1,8 | 1,0 |
| LM B2920 | 1,3 | 1,0 | 1,8 | 1,0 |
| LM B2923 | 1,5 | 1,0 | 1,8 | 1,0 |
| SRH6180354 | 1,5 | 1,0 | 1,8 | 1,0 |
| SRH6180463 | 1,3 | 1,0 | 1,8 | 1,0 |
| Fenja* | 1,3 | 1,0 | 1,8 | 1,0 |
| Kalla* | 1,3 | 1,0 | 2,3 | 1,0 |
| Lagoon* | 1,3 | 1,0 | 1,8 | 1,0 |
| Sunder* | 1,3 | 1,0 | 1,8 | 1,0 |

* standardsort / standard variety

TALIRAPS, TALIRÜPS / WINTER OILSEED RAPE, WINTER TURNIP OILSEED RAPE

Brassica napus L. var. oleifera subvar. biennis

Brassica rapa L. var. oleifera subvar. biennis

Talirüpsi sortide tunnustamine 2022*

| Sort | Pind, ha | Sort | Pind, ha |
|--------|----------|------|----------|
| Legato | 78,84 | Aita | 2,05 |

* Vastavalt PTA põldtunnustamise andmetele / according to AFB field inspection data

Katse agrotehnika / Agrotechnics of the trial 2021/2022

| VILJANDI | VÕRU |
|---------------------------------------|---------------------|
| Mullaliik / Soil | |
| G ₀ | LP |
| Eelvili / Previous crop | |
| valge mesikas / <i>Melilotus alba</i> | peakapsas / cabbage |
| Külvikuupäev / Sowing date | |
| 24.08.2021 | 21.08.2021 |

Külvinorm / Sowing rate - 65 id.tera/m² / germinating seeds per m²

Väetis (TA kg/ha); väetamise aeg / Fertilizer - level of N-P-K; Time of fertilization

| N | P | K | S | mikrod | N | P | K | S | mikrod |
|------------------------------------|----|----|----|--------|--------------------------------|----|-----|----|--------|
| 11.08.2021 | | | | | 16.08.2021 | | | | |
| 24 | 26 | 75 | 6 | Mg-1,8 | 32 | 35 | 100 | 8 | Mg-1,8 |
| 16.09.2021 | | | | | 22.09.2021 | | | | |
| 27 | 7 | 16 | 4 | Mg-1,5 | 39 | | | 23 | |
| 30.09.2021 | | | | | 01.10.2021 | | | | |
| Tradebor - 2,0 l/ha | | | | | Hefe Amino Plus 300 - 1,0 l/ha | | | | |
| Final K - 2,0 l/ha | | | | | 19.10.2021 | | | | |
| Ruter AA - 2,0 l/ha | | | | | Final K - 2,0 l/ha | | | | |
| 18.04.2022 | | | | | 12.04.2022 | | | | |
| 54 | | | 8 | Ca-12 | 40 | | | 20 | |
| 29.04.2022 | | | | | 03.05.2022 | | | | |
| 54 | | | 8 | | 30 | | | 15 | |
| 02.05.2022 | | | | | 10.05.2022 | | | | |
| Profi Boor 150 - 2,0 l/ha | | | | | Tradebor - 2,0 l/ha | | | | |
| 17.05.2022 | | | | | | | | | |
| YaraVita Brassitrel Pro - 4,0 l/ha | | | | | | | | | |
| 06.06.2022 | | | | | | | | | |
| Final K - 2,0 l/ha | | | | | | | | | |
| Delfan Plus - 0,5 l/ha | | | | | | | | | |
| 159 | 33 | 91 | 26 | Kokku | 141 | 35 | 100 | 66 | Kokku |

| VILJANDI | VÕRU |
|---|------------------------------|
| Taimekaitse: (norm l/ha, töötl. kuupäev) / Plant protection (litre per hectare, date of the treatment) | |
| 24.08.2021 | 25.08.2021 |
| Butisan Avant - 2,5 l/ha | Butisan Avant - 2,0 l/ha |
| 07.10.2021 | 01.10.2021 |
| Caryx - 0,7 l/ha | Caryx - 1,0 l/ha |
| 02.05.2022 | 10.05.2022 |
| Cyperkill 500 EC - 0,05 l/ha | Mavrik - 0,2 l/ha |
| 17.05.2022 | 13.05.2022 |
| Mospilan 20 SG - 200 g/ha | Propulse - 1,0 l/ha |
| 01.06.2022 | Cyperkill 500 EC - 0,05 l/ha |
| Propulse - 1,0 l/ha | 01.06.2022 |
| Mavrik - 0,2 l/ha | Pictor Active - 0,6 l/ha |
| | Mospilan 20 SG - 200 g/ha |

Talirapsi ja -rüpsi katseandmed

| Sort Variety | Arvestuslik saak, kg/ha Yield, kg/ha | | | |
|------------------------|---|-----|-------|-----|
| | Viljandi | | Võru | |
| | kg/ha | % | kg/ha | % |
| CWH333 (Tatiana) | 5089 | 105 | 2610 | 98 |
| CWH520 (Crocant) | 4898 | 101 | 4253 | 160 |
| DMH 512 | 5937 | 122 | 3610 | 136 |
| DMH 532 | 5680 | 117 | 3159 | 119 |
| LE16/316 (Artemis) | 5740 | 118 | 3650 | 137 |
| LE17/332 (LG Aviron) | 5319 | 110 | 3182 | 120 |
| LE18/349 (LG Austin) | 5456 | 113 | 4250 | 160 |
| LE18/350 (LG Auckland) | 5422 | 112 | 2977 | 112 |
| NPZ18205W11 (Kasalla) | 5133 | 106 | 3183 | 120 |
| NPZ18227W23 (Colin CL) | 4780 | 99 | 2951 | 111 |
| NPZ19234W11 (Turbo) | 5320 | 110 | 2173 | 82 |
| NPZ19249W13 (Messi) | 5406 | 111 | 3238 | 122 |
| RAP 583 (Dart) | 4263 | 88 | 2658 | 100 |
| RAP18211W11 (Metropol) | 5421 | 112 | 3587 | 135 |
| RAP19232W11 | 5406 | 111 | 3138 | 118 |
| RAP19239W11 (Matisse) | 4973 | 103 | 3724 | 140 |
| RAP19251W11 (Triple) | 5797 | 120 | 3240 | 122 |
| WRH 562 (Jurek) | 5186 | 107 | 4227 | 159 |
| WRH 565 (Desperado) | 4438 | 92 | 3745 | 141 |
| WRH 612 | 5263 | 109 | 3134 | 118 |
| Mercedes* | 4891 | | 2161 | |
| Phantom* | 5036 | 100 | 2702 | 100 |
| Temptation* | 4620 | | 3104 | |
| PD 5% (LSD) | 485 | | 906 | |

Jätkekutse / postregistration

| | | | | |
|-------------|------|-----|------|-----|
| Absolut | 4898 | 101 | 3751 | 141 |
| Architect | 5553 | 115 | 3608 | 136 |
| Mercedes* | 4891 | | 2161 | |
| Phantom* | 5036 | 100 | 2702 | 100 |
| Temptation* | 4620 | | 3104 | |
| PD 5% (LSD) | 388 | | 1277 | |

Talirüps

| | | | | |
|--------------------|------|-----|------|-----|
| SC1036 (Successor) | 3782 | 104 | 1602 | 93 |
| Arrivée* | 3688 | | 1981 | |
| Legato* | 3591 | 100 | 1455 | 100 |
| PD 5% (LSD) | 226 | | 567 | |

* standardsort / standard variety

| Sort Variety | Talvekindlus, Winter hardiness, 1-9 p (1=halb/bad) | | Kasvuperiood, Growing period, päeva/days | |
|------------------------|--|------|--|------|
| | Viljandi | Võru | Viljandi | Võru |
| CWH333 (Tatiana) | 8,3 | 7,0 | 346 | 361 |
| CWH520 (Crocant) | 8,0 | 7,0 | 346 | 352 |
| DMH 512 | 8,3 | 7,5 | 347 | 353 |
| DMH 532 | 8,0 | 8,0 | 347 | 353 |
| LE16/316 (Artemis) | 8,0 | 8,0 | 346 | 353 |
| LE17/332 (LG Aviron) | 8,0 | 6,5 | 347 | 353 |
| LE18/349 (LG Austin) | 8,3 | 7,5 | 347 | 353 |
| LE18/350 (LG Auckland) | 8,7 | 7,5 | 349 | 353 |
| NPZ18205W11 (Kasalla) | 8,0 | 6,8 | 349 | 353 |
| NPZ18227W23 (Colin CL) | 7,7 | 7,3 | 347 | 353 |
| NPZ19234W11 (Turbo) | 8,0 | 7,3 | 346 | 353 |
| NPZ19249W13 (Messi) | 8,3 | 7,8 | 348 | 354 |
| RAP 583 (Dart) | 7,7 | 8,0 | 348 | 353 |
| RAP18211W11 (Metropol) | 8,3 | 8,0 | 348 | 354 |
| RAP19232W11 | 8,7 | 7,0 | 347 | 354 |
| RAP19239W11 (Matisse) | 8,0 | 7,8 | 349 | 353 |
| RAP19251W11 (Triple) | 8,0 | 7,5 | 348 | 353 |
| WRH 562 (Jurek) | 7,7 | 8,0 | 349 | 354 |
| WRH 565 (Desperado) | 7,3 | 7,8 | 347 | 354 |
| WRH 612 | 8,7 | 7,8 | 349 | 353 |
| Mercedes* | 8,0 | 7,0 | 345 | 356 |
| Phantom* | 8,0 | 6,8 | 344 | 353 |
| Temptation* | 7,7 | 7,5 | 347 | 354 |

Jätukukitse / postregistration

| | | | | |
|-------------|-----|-----|-----|-----|
| Absolut | 8,3 | 7,8 | 346 | 353 |
| Architect | 8,7 | 6,8 | 346 | 354 |
| Mercedes* | 8,0 | 7,0 | 345 | 356 |
| Phantom* | 8,0 | 6,8 | 344 | 353 |
| Temptation* | 7,7 | 7,5 | 347 | 354 |

Talirüps

| | | | | |
|--------------------|-----|-----|-----|-----|
| SC1036 (Successor) | 8,3 | 7,3 | 335 | 333 |
| Arrivée* | 8,7 | 7,3 | 333 | 333 |
| Legato* | 9,0 | 7,8 | 331 | 333 |

* standardsort / standard variety

| Sort Variety | Toorrasv k.a, Raw fat in d.m, % | | Proteiin k.a, Protein in d.m, % | | TTM k.a, TKW d.m, g | |
|------------------------|---------------------------------------|------|---------------------------------------|------|---------------------------|------|
| | Viljandi | Võru | Viljandi | Võru | Viljandi | Võru |
| CWH333 (Tatiana) | 51,6 | 48,5 | 17,2 | 19,7 | 4,47 | 5,00 |
| CWH520 (Crocant) | 49,8 | 47,6 | 17,7 | 19,9 | 4,43 | 4,96 |
| DMH 512 | 52,1 | 49,2 | 16,6 | 18,9 | 4,33 | 4,79 |
| DMH 532 | 52,1 | 48,7 | 16,9 | 19,4 | 4,71 | 4,42 |
| LE16/316 (Artemis) | 52,6 | 48,4 | 15,9 | 18,7 | 4,96 | 5,38 |
| LE17/332 (LG Aviron) | 51,4 | 46,8 | 16,4 | 19,6 | 4,72 | 5,25 |
| LE18/349 (LG Austin) | 52,1 | 47,9 | 16,6 | 19,4 | 4,67 | 5,17 |
| LE18/350 (LG Auckland) | 52,5 | 48,1 | 16,6 | 19,6 | 5,52 | 6,03 |
| NPZ18205W11 (Kasalla) | 51,5 | 48,2 | 16,9 | 19,2 | 4,90 | 5,19 |
| NPZ18227W23 (Colin CL) | 49,6 | 46,7 | 17,4 | 20,0 | 4,80 | 5,13 |
| NPZ19234W11 (Turbo) | 51,3 | 46,7 | 16,6 | 19,7 | 4,40 | 4,99 |
| NPZ19249W13 (Messi) | 51,6 | 48,9 | 17,0 | 18,7 | 4,64 | 5,07 |
| RAP 583 (Dart) | 52,4 | 48,8 | 15,9 | 18,8 | 4,04 | 4,67 |
| RAP18211W11 (Metropol) | 52,4 | 49,6 | 16,3 | 18,3 | 3,99 | 4,88 |
| RAP19232W11 | 51,6 | 49,0 | 16,6 | 18,9 | 4,31 | 4,85 |
| RAP19239W11 (Matisse) | 50,8 | 48,7 | 16,5 | 18,0 | 4,32 | 4,85 |
| RAP19251W11 (Triple) | 52,3 | 49,9 | 15,7 | 18,2 | 4,23 | 4,85 |
| WRH 562 (Jurek) | 52,9 | 49,9 | 15,6 | 17,6 | 4,03 | 4,83 |
| WRH 565 (Desperado) | 51,6 | 49,3 | 17,6 | 19,1 | 4,78 | 4,88 |
| WRH 612 | 53,2 | 49,7 | 15,3 | 18,0 | 4,05 | 5,17 |
| Mercedes* | 53,4 | 49,5 | 16,2 | 18,8 | 4,26 | 4,78 |
| Phantom* | 52,0 | 49,0 | 15,9 | 18,4 | 4,07 | 4,89 |
| Temptation* | 53,0 | 49,6 | 16,2 | 18,8 | 4,20 | 4,69 |

Jätukutse / postregistration

| | | | | | | |
|-------------|------|------|------|------|------|------|
| Absolut | 49,7 | 45,9 | 17,1 | 21,2 | 4,55 | 5,37 |
| Architect | 52,2 | 47,8 | 16,0 | 20,0 | 4,64 | 5,28 |
| Mercedes* | 53,4 | 49,5 | 16,2 | 18,8 | 4,26 | 4,78 |
| Phantom* | 52,0 | 49,0 | 15,9 | 18,4 | 4,07 | 4,89 |
| Temptation* | 53,0 | 49,6 | 16,2 | 18,8 | 4,20 | 4,69 |

Talirüps

| | | | | | | |
|--------------------|------|------|------|------|------|------|
| SC1036 (Successor) | 45,6 | 41,3 | 20,3 | 24,7 | 2,42 | 2,58 |
| Arrivée* | 46,5 | 42,7 | 20,1 | 23,7 | 2,60 | 2,54 |
| Legato* | 46,7 | 41,2 | 19,8 | 25,0 | 2,52 | 2,65 |

* standardsort / standard variety

| Sort Variety | Glükosinolaadid, Glycosinolates, µmol/g | | Taimede kõrgus, Height of plant, cm | | Seisukindlus, Lodging resistance, 1-9 p (1= halb/bad) | |
|------------------------|---|------|---|------|--|------|
| | Viljandi | Võru | Viljandi | Võru | Viljandi | Võru |
| CWH333 (Tatiana) | 14,5 | 23,3 | 143 | 105 | 8,3 | 8,3 |
| CWH520 (Crocant) | 16,8 | 22,7 | 164 | 129 | 9,0 | 9,0 |
| DMH 512 | 18,0 | 24,6 | 162 | 127 | 8,3 | 8,5 |
| DMH 532 | 18,1 | 25,4 | 160 | 125 | 8,3 | 8,8 |
| LE16/316 (Artemis) | 13,4 | 22,0 | 152 | 121 | 8,0 | 8,8 |
| LE17/332 (LG Aviron) | 12,5 | 20,3 | 155 | 106 | 8,3 | 8,5 |
| LE18/349 (LG Austin) | 14,7 | 20,9 | 150 | 123 | 8,3 | 8,8 |
| LE18/350 (LG Auckland) | 14,0 | 21,2 | 150 | 117 | 8,3 | 8,5 |
| NPZ18205W11 (Kasalla) | 17,3 | 23,8 | 156 | 117 | 8,3 | 8,5 |
| NPZ18227W23 (Colin CL) | 17,8 | 25,5 | 146 | 107 | 8,7 | 8,5 |
| NPZ19234W11 (Turbo) | 10,4 | 19,7 | 161 | 116 | 9,0 | 8,8 |
| NPZ19249W13 (Messi) | 17,1 | 25,8 | 136 | 113 | 8,5 | 8,8 |
| RAP 583 (Dart) | 14,0 | 21,0 | 145 | 112 | 8,7 | 8,8 |
| RAP18211W11 (Metropol) | 12,1 | 16,6 | 152 | 123 | 9,0 | 9,0 |
| RAP19232W11 | 11,8 | 18,2 | 144 | 119 | 9,0 | 9,0 |
| RAP19239W11 (Matisse) | 13,5 | 19,2 | 147 | 119 | 8,3 | 9,0 |
| RAP19251W11 (Triple) | 10,6 | 17,7 | 157 | 123 | 8,7 | 9,0 |
| WRH 562 (Jurek) | 13,1 | 19,0 | 148 | 121 | 8,3 | 9,0 |
| WRH 565 (Desperado) | 18,7 | 25,6 | 157 | 122 | 8,0 | 9,0 |
| WRH 612 | 11,4 | 17,3 | 154 | 121 | 8,3 | 9,0 |
| Mercedes* | 12,2 | 19,5 | 146 | 113 | 8,3 | 8,3 |
| Phantom* | 11,1 | 18,0 | 144 | 112 | 8,3 | 8,8 |
| Temptation* | 14,9 | 19,8 | 150 | 114 | 8,7 | 9,0 |

Jätukatse / postregistration

| | | | | | | |
|-------------|------|------|-----|-----|-----|-----|
| Absolut | 15,5 | 21,0 | 151 | 119 | 8,7 | 8,5 |
| Architect | 15,1 | 23,0 | 152 | 117 | 8,7 | 8,8 |
| Mercedes* | 12,2 | 19,5 | 146 | 113 | 8,3 | 8,3 |
| Phantom* | 11,1 | 18,0 | 144 | 112 | 8,3 | 8,8 |
| Temptation* | 14,9 | 19,8 | 150 | 114 | 8,7 | 9,0 |

Talirüps

| | | | | | | |
|--------------------|------|------|-----|-----|-----|-----|
| SC1036 (Successor) | 13,1 | 12,0 | 162 | 133 | 8,0 | 6,5 |
| Arrivée* | 12,5 | 14,5 | 162 | 135 | 8,0 | 6,5 |
| Legato* | 19,5 | 21,4 | 162 | 123 | 8,0 | 6,5 |

* standardsort / standard variety

Haigused, 1-9 p (1=kahjust. puudub) / Diseases, 1-9 p (1=not infected)

| Sort Variety | Ristõieliste kuivlaikus <i>Alternaria brassicae</i> | | Valgemädanik <i>Sclerotinia sclerotiorum</i> | | Mustmädanik <i>Leptosphaeria maculans</i> | |
|------------------------|---|------|---|------|--|------|
| | Viljandi | Võru | Viljandi | Võru | Viljandi | Võru |
| CWH333 (Tatiana) | 4,0 | 1,0 | 3,0 | 1,5 | 2,7 | 1,0 |
| CWH520 (Crocant) | 3,7 | 1,0 | 2,0 | 1,5 | 2,0 | 1,0 |
| DMH 512 | 3,3 | 1,0 | 2,3 | 1,5 | 2,0 | 1,0 |
| DMH 532 | 3,0 | 1,0 | 2,3 | 2,0 | 2,0 | 1,0 |
| LE16/316 (Artemis) | 4,0 | 1,0 | 2,3 | 2,0 | 2,7 | 1,0 |
| LE17/332 (LG Aviron) | 3,3 | 1,0 | 2,3 | 1,5 | 2,0 | 1,0 |
| LE18/349 (LG Austin) | 3,3 | 1,0 | 2,7 | 2,0 | 2,3 | 1,0 |
| LE18/350 (LG Auckland) | 3,0 | 1,0 | 2,0 | 1,8 | 2,7 | 1,0 |
| NPZ18205W11 (Kasalla) | 3,0 | 1,0 | 2,0 | 1,8 | 2,0 | 1,0 |
| NPZ18227W23 (Colin CL) | 3,7 | 1,3 | 2,3 | 1,5 | 2,3 | 1,0 |
| NPZ19234W11 (Turbo) | 3,7 | 1,0 | 2,7 | 1,8 | 2,0 | 1,0 |
| NPZ19249W13 (Messi) | 3,5 | 1,0 | 1,5 | 1,8 | 2,5 | 1,0 |
| RAP 583 (Dart) | 3,0 | 1,3 | 2,7 | 1,3 | 2,0 | 1,0 |
| RAP18211W11 (Metropol) | 3,0 | 1,0 | 1,7 | 1,3 | 2,3 | 1,0 |
| RAP19232W11 | 3,3 | 1,3 | 2,0 | 1,5 | 2,3 | 1,0 |
| RAP19239W11 (Matisse) | 3,3 | 1,0 | 2,0 | 1,5 | 2,0 | 1,0 |
| RAP19251W11 (Triple) | 3,0 | 1,0 | 1,7 | 1,3 | 2,7 | 1,0 |
| WRH 562 (Jurek) | 3,3 | 1,0 | 1,7 | 1,3 | 2,0 | 1,0 |
| WRH 565 (Desperado) | 3,0 | 1,0 | 2,0 | 1,3 | 2,0 | 1,0 |
| WRH 612 | 3,0 | 1,0 | 2,0 | 1,3 | 2,0 | 1,0 |
| Mercedes* | 4,0 | 1,0 | 2,0 | 1,8 | 2,3 | 1,0 |
| Phantom* | 4,0 | 1,0 | 2,7 | 1,8 | 2,7 | 1,0 |
| Temptation* | 3,3 | 1,0 | 1,3 | 1,0 | 2,0 | 1,0 |

Jätukutse / postregistration

| | | | | | | |
|-------------|-----|-----|-----|-----|-----|-----|
| Absolut | 4,0 | 1,0 | 2,3 | 1,8 | 2,3 | 1,0 |
| Architect | 3,3 | 1,0 | 2,3 | 1,3 | 2,3 | 1,0 |
| Mercedes* | 4,0 | 1,0 | 2,0 | 1,8 | 2,3 | 1,0 |
| Phantom* | 4,0 | 1,0 | 2,7 | 1,8 | 2,7 | 1,0 |
| Temptation* | 3,3 | 1,0 | 1,3 | 1,0 | 2,0 | 1,0 |

Talirüps

| | | | | | | |
|--------------------|-----|-----|-----|-----|-----|-----|
| SC1036 (Successor) | 3,0 | 1,0 | 2,0 | 1,0 | 2,0 | 1,0 |
| Arrivée* | 3,3 | 1,0 | 2,0 | 1,0 | 2,3 | 1,0 |
| Legato* | 3,7 | 1,0 | 1,3 | 1,0 | 3,3 | 1,0 |

* standardsort / standard variety

Haigused, 1-9 p (1=kahjust. puudub) / Diseases, 1-9 p (1=not infected)

| Sort Variety | Närbumistõbi <i>Verticillium longisporum</i> | | Ristõieliste ebajahukaste <i>Peronospora brassicae</i> | | Hahkhallitus <i>Botrytis cinerea</i> | |
|------------------------|---|------|--|------|---|------|
| | Viljandi | Võru | Viljandi | Võru | Viljandi | Võru |
| CWH333 (Tatiana) | 4,0 | 1,0 | 2,0 | 2,5 | 1,0 | 2,8 |
| CWH520 (Crocant) | 3,7 | 1,0 | 2,0 | 2,5 | 1,0 | 3,0 |
| DMH 512 | 3,7 | 1,0 | 2,0 | 2,8 | 1,0 | 2,8 |
| DMH 532 | 4,0 | 1,0 | 2,0 | 3,0 | 1,0 | 2,8 |
| LE16/316 (Artemis) | 3,0 | 1,0 | 2,0 | 2,8 | 1,0 | 3,5 |
| LE17/332 (LG Aviron) | 3,3 | 1,0 | 2,0 | 2,5 | 1,0 | 3,0 |
| LE18/349 (LG Austin) | 3,7 | 1,0 | 2,0 | 2,8 | 1,0 | 2,8 |
| LE18/350 (LG Auckland) | 2,7 | 1,0 | 2,0 | 2,8 | 1,0 | 3,0 |
| NPZ18205W11 (Kasalla) | 3,3 | 1,0 | 2,0 | 3,0 | 1,0 | 2,8 |
| NPZ18227W23 (Colin CL) | 3,3 | 1,0 | 2,0 | 2,5 | 1,0 | 2,5 |
| NPZ19234W11 (Turbo) | 3,3 | 1,0 | 2,0 | 3,3 | 1,0 | 3,0 |
| NPZ19249W13 (Messi) | 4,0 | 1,0 | 2,0 | 2,3 | 1,0 | 2,5 |
| RAP 583 (Dart) | 3,0 | 1,0 | 2,0 | 3,0 | 1,0 | 3,0 |
| RAP18211W11 (Metropol) | 3,0 | 1,0 | 2,0 | 2,8 | 1,0 | 3,5 |
| RAP19232W11 | 3,0 | 1,0 | 2,0 | 3,5 | 1,0 | 3,0 |
| RAP19239W11 (Matisse) | 3,3 | 1,0 | 2,0 | 2,8 | 1,0 | 3,0 |
| RAP19251W11 (Triple) | 3,3 | 1,0 | 2,0 | 2,8 | 1,0 | 3,0 |
| WRH 562 (Jurek) | 2,7 | 1,0 | 2,0 | 2,8 | 1,0 | 2,8 |
| WRH 565 (Desperado) | 3,3 | 1,0 | 2,0 | 2,8 | 1,0 | 3,0 |
| WRH 612 | 3,0 | 1,0 | 2,0 | 3,3 | 1,0 | 3,3 |
| Mercedes* | 4,0 | 1,0 | 2,0 | 3,0 | 1,0 | 3,0 |
| Phantom* | 3,0 | 1,0 | 2,0 | 3,0 | 1,0 | 3,0 |
| Temptation* | 3,0 | 1,0 | 2,0 | 2,3 | 1,0 | 2,8 |

Jätukukitse / postregistration

| | | | | | | |
|-------------|-----|-----|-----|-----|-----|-----|
| Absolut | 3,7 | 1,0 | 2,0 | 2,8 | 1,0 | 2,8 |
| Architect | 3,0 | 1,0 | 2,0 | 2,8 | 1,0 | 2,8 |
| Mercedes* | 4,0 | 1,0 | 2,0 | 3,0 | 1,0 | 3,0 |
| Phantom* | 3,0 | 1,0 | 2,0 | 3,0 | 1,0 | 3,0 |
| Temptation* | 3,0 | 1,0 | 2,0 | 2,3 | 1,0 | 2,8 |

Talirüps

| | | | | | | |
|--------------------|-----|-----|-----|-----|-----|-----|
| SC1036 (Successor) | 1,0 | 1,0 | 2,0 | 2,3 | 1,0 | 4,0 |
| Arrivée* | 1,0 | 1,0 | 2,3 | 2,3 | 1,0 | 4,0 |
| Legato* | 1,0 | 1,0 | 3,3 | 2,3 | 1,0 | 4,3 |

* standardsort / standard variety

HEINTAIMED / GRASSES

Heintaimede sortide tunnustamine 2022*

| Kultuur | Sort | Tunnustatud pind, ha |
|---|------------|----------------------|
| Aasnurmikas <i>Poa pratensis</i> | Esto | 2,23 |
| Harilik aruhein <i>Festuca pratensis</i> | Arni | 98,32 |
| | Pasja | 51,90 |
| | Pradel | 44,63 |
| | Tored | 36,44 |
| | Pardus | 32,29 |
| Harilik keerispea <i>Phacelia tanacetifolia</i> | Meva | 38,07 |
| Ida-kitsehernes <i>Galega orientalis</i> | Gale | 28,26 |
| Itaalia raihein <i>Lolium multiflorum</i> | Druva | 6,77 |
| | Talvike | 2,29 |
| Karjamaa raihein <i>Lolium perenne</i> | Raite | 91,88 |
| | Melromi | 29,84 |
| | Raidi | 4,66 |
| Lutsern <i>Medicago sativa</i> | Karlu | 28,70 |
| | Jõgeva 118 | 11,77 |
| | Juurlu | 6,27 |
| Ohtetu püsiluste <i>Bromus inermis</i> | Lehis | 0,20 |
| Punane aruhein <i>Festuca rubra</i> | Kauni | 52,74 |
| Punane ristik <i>Trifolium pratense</i> | Jõgeva 433 | 157,92 |
| | Saija | 89,09 |
| | Ilte | 55,48 |
| | Varte | 53,34 |
| | SW Yngve | 34,55 |
| | Jõgeva 205 | 8,25 |
| Põldtimut <i>Phleum pratense</i> | Tika | 99,72 |
| | Jõgeva 54 | 81,47 |
| | Grindstad | 68,00 |
| | Rhonia | 58,31 |
| | Tia | 42,14 |
| | Tryggve | 32,76 |
| | Erecta RvP | 25,41 |
| | Switch | 19,79 |
| Päideroog <i>Phalaris arundinacea</i> | Pedja | 80,99 |
| Roog-aruhein <i>Festuca arundinacea</i> | Retu | 47,36 |
| | Iliade | 36,83 |
| | Agile | 12,16 |
| Roosa ristik <i>Trifolium hybridum</i> | Jõgeva 2 | 6,65 |
| Valge mesikas <i>Melilotus alba</i> | Kuusiku 1 | 40,52 |
| Valge ristik <i>Trifolium repens</i> | Jõgeva 4 | 7,76 |
| | Tooma | 0,45 |

* Vastavalt PTA põldtunnustamise andmetele / according to AFB field inspection data

Katse agrotehnika / Agrotechnics of the trial

| VILJANDI | | |
|---|-------------------------|---------------|
| Mullaliik / Soil | Klg | |
| Eelvili / Previous crop | mustkesa / black fallow | |
| Külvinorm / Sowing rate | 20 kg/ha | |
| Külvikuupäev / Sowing date | 22.05.2020 | |
| Väetis (TA kg/ha); väetamise aeg / Fertilizer - level of N-P-K; Time of fertilization | 21.05.2020 | 27-16-62 |
| | 12.10.2020 | 0-11-45 |
| | 12.10.2021 | 10-9-50; S-14 |

Heintaimed saagiaasta 2022 (katse rajamise aasta 2020) Grasses results in 2022 (year of sowing 2020)

Hübriidlutsern *Medicago X varia* Martyn

| Sort Variety | Haljasmassi saak, kg/ha Yield, kg/ha | Kuivaine saak, kg/ha Dry matter yield, kg/ha | | | |
|--------------------|--|---|----------------------|----------------------|----------------------|
| | | Kokku / Total | 1. niide 1-st cut | 2. niide 2-nd cut | 3. niide 3-rd cut |
| FD0906 (Andantino) | 60650 | 7353 | 3231 | 3448 | 14032 |
| FD112 (Cigale) | 67500 | 7660 | 3581 | 4192 | 15433 |
| Daisy* | 66725 | 7051 | 3427 | 4183 | 14660 |
| Jõgeva 118* | 59500 | 6306 | 3349 | 2978 | 12633 |
| Karlu* | 56325 | 5948 | 3410 | 2987 | 12344 |
| PD5% (LSD) | 4699 | | | | 1104 |

| Sort Variety | Proteiin kuivaines, % Crude protein, % | | | Happekiud, % Acid Detergent Fiber, % | | |
|--------------------|---|----------------------|----------------------|---|----------------------|----------------------|
| | 1. niide 1-st cut | 2. niide 2-nd cut | 3. niide 3-rd cut | 1. niide 1-st cut | 2. niide 2-nd cut | 3. niide 3-rd cut |
| FD0906 (Andantino) | 21,6 | 24,2 | 21,3 | 29,0 | 26,4 | 29,8 |
| FD112 (Cigale) | 21,4 | 21,7 | 22,7 | 29,8 | 29,8 | 28,8 |
| Daisy* | 21,8 | 23,3 | 20,7 | 28,0 | 26,7 | 30,1 |
| Jõgeva 118* | 21,4 | 26,6 | 24,5 | 29,3 | 25,1 | 27,5 |
| Karlu* | 21,6 | 23,9 | 27,1 | 28,5 | 29,0 | 23,7 |

* standardsort / standard variety

| Sort Variety | Neutraalkiud, % Neutral Detergent Fiber, % | | | Seeduva kuivaine sisaldus, % Digestibility of Dry Matter, % | | |
|--------------------|---|----------------------|----------------------|--|----------------------|----------------------|
| | 1. niide 1-st cut | 2. niide 2-nd cut | 3. niide 3-rd cut | 1. niide 1-st cut | 2. niide 2-nd cut | 3. niide 3-rd cut |
| FD0906 (Andantino) | 36,2 | 31,4 | 38,2 | 66,3 | 68,3 | 59,1 |
| FD112 (Cigale) | 36,4 | 36,5 | 36,9 | 65,7 | 65,7 | 60,2 |
| Daisy* | 34,3 | 31,9 | 38,9 | 67,1 | 68,1 | 58,6 |
| Jõgeva 118* | 35,7 | 30,4 | 35,4 | 66,1 | 69,3 | 61,3 |
| Karlu* | 35,8 | 37,1 | 31,8 | 66,7 | 66,3 | 64,1 |

| Sort Variety | Metaboliseeruv energia, MJ/kg Metabolizable Energy, MJ/kg | | |
|--------------------|--|----------------------|----------------------|
| | 1. niide 1-st cut | 2. niide 2-nd cut | 3. niide 3-rd cut |
| FD0906 (Andantino) | 10,0 | 10,3 | 9,9 |
| FD112 (Cigale) | 9,9 | 9,9 | 10,1 |
| Daisy* | 10,2 | 10,3 | 9,9 |
| Jõgeva 118* | 10,0 | 10,5 | 10,2 |
| Karlu* | 10,1 | 10,0 | 10,7 |

* standardsort / standard variety

ÜhendPiP KATSE

Katse sai teoks Euroopa Maaelu Arengu Põllumajandusfondi toetusel "Teadmusiirde pikaajalise programmi taimekasvatuse tegevusvaldkonnas" (ÜhendPiP) raames. Programmi eesmärgiks on vastavalt Eesti põllumajanduse ja toidutootmise arenguvajadusele ning erinevate arengukavade eesmärkidele korraldada teadmusiirde tegevusi, tehes seda erinevaid osapooli kaasates nii otsustusprotsessis, kui tegevuste elluviimisel (<https://www.pikk.ee/valdkonnad/teadmusiirde-pikaajalised-programmid/uhendpip/>).

TALINISU (winter wheat) sordid 'Edvins' ja 'Skagen' neljas korduses

Katse agrotehnika / Agrotechnics of the trial 2021/2022

Külv / Sowing date: 10.09.2021 ja 20.09.2021

Külvinorm / Sowing rate: 450 ja 500 id tera/m²

Eelvili / Previous crop: valge mesikas

Reavahe: 12 cm ja 25 cm

Sügiskasvu lõpp: 13.11.2021

Kevadkasvu algus: 08.04.2022

Väetis / Fertilizer:

08.09.21 150 kg/ha YaraMila 18-11-13 (N-27; P-7; K16; S-4; B-0,03; Mg-1,5)

18.04.22 200 kg/ha AXAN NS27-4 (N-54; S-8; Ca-12; Mg-1,4)

29.04.22 200 kg/ha AXAN NS27-4 (N-54; S-8; Ca-12; Mg-1,4) – III ja IV kordus

03.05.22 1,0 l/ha PK-Max (P-0,2; K-0,3)

13.05.22 2,0 l/ha Gramitrel (N-0,1; Mg-0,3; Cu-0,1; Mn-0,3; Zn-0,2)

25.05.22 139 kg/ha YaraMila 18-11-13 (N-25; P-7; K-15; S-4; B-0,03; Mg-1,4)

30.05.22 1,0 l/ha Viva Gel KS 37-65 (K-0,31; S-0,65)

15.06.22 0,5 l/ha Delfan (N-0,05)

I ja II kordus - 106 kg/ha N + biostimulaator

III ja IV kordus - 160 kg/ha N

Biostimulaator / Biostimulator:

13.05.22 50 g/ha Nutribio N I kordus

13.05.22 100 g/ha Nutribio N II kordus

Nutribio N on looduslik, spetsiifilise toimega toode, mis põhineb perekonna *Azotobacter* sp. bakteritel, mis tõhustavad õhulämmastiku (N) sidumist taimedel tänu fütoensüümile. Biostimuleeriv toime soodustab taimedel abiootilise stressi taluvust ja parandab saagi kvaliteeti. Väidetavalt asendab 50 g Nutribio N kuni 35 kg N/ha. Samuti peaks paranema mulla bioloogiline aktiivsus ja viljakus ning vähenema lämmastiku leostumine atmosfääri.

Kasvuregulaator / Growth regulator:

16.05.22 0,3 kg/ha MedaxMax I-III kordus

16.05.22 0,3 l/ha Moddus Start IV kordus

Taimekaitse / Plant protection:**Puhtimispreparaat:** Vibrance Pro 2,0 l/1 tonnile**Herbitsiid / Herbicide:**

| | | | |
|----------|----------------------|-----------------------------|-----------------------|
| 18.10.21 | 0,5 l/ha + 2,0 l/ha | Komplet + Flight Forte | Kasvufaas BBCH |
| 03.05.22 | 0,2 l/ha + 22,5 g/ha | Legacy 500SC + Trimmer 50SG | 13-21 25-30 |

Fungitsiid / Fungicide:

| | | | |
|----------|---------------------|-----------------------------|-------|
| 13.05.22 | 0,5 + 0,25 l/ha | Balaya Flex pack | 31-33 |
| 30.05.22 | 1,0 l/ha | Revytrex | 49 |
| 15.06.22 | 0,5 l/ha + 0,5 l/ha | Variano Xpro + Input Triple | 51-59 |

Katsetulemused**SKAGEN**

| id tera/ m ² | Rea laius, cm | Saak 14 % niiskusega, kg/ha | Mahu- mass, g/l | Proteiin (k.a), % | Lange- misarv, sek | Märg kleep- valk, % | Gluteen- indeks, % | 1000 tera mass (k.a), g | Zeleny arv, ml |
|----------------------------|---------------------|-----------------------------------|-----------------------|----------------------|--------------------------|------------------------------|--------------------------|----------------------------------|----------------------|
|----------------------------|---------------------|-----------------------------------|-----------------------|----------------------|--------------------------|------------------------------|--------------------------|----------------------------------|----------------------|

I kordus = N-106 kg/ha + NutribioN, 50 g/ha

| | | | | | | | | | |
|-----|----|--------------|------------|------|-----|------|----|------|----|
| 500 | 12 | 9,70 | 791 | 13,1 | 347 | 29,2 | 72 | 40,5 | 40 |
| 500 | 24 | 10,39 | 794 | 12,6 | 356 | 27,4 | 77 | 38,1 | 37 |
| 450 | 24 | 10,40 | 799 | 12,3 | 363 | 25,4 | 89 | 38,8 | 36 |
| | | 10,16 | 795 | | | | | | |

II kordus = N-106 kg/ha + NutribioN, 100 g/ha

| | | | | | | | | | |
|-----|----|--------------|------------|------|-----|------|----|------|----|
| 500 | 12 | 10,25 | 793 | 13,1 | 355 | 29,5 | 68 | 40,2 | 41 |
| 500 | 24 | 10,02 | 799 | 13,4 | 338 | 29,5 | 77 | 38,6 | 44 |
| 450 | 24 | 9,93 | 796 | 13,1 | 380 | 29,4 | 75 | 37,9 | 42 |
| | | 10,07 | 796 | | | | | | |

III kordus = N-160 kg/ha

| | | | | | | | | | |
|-----|----|-------------|------------|------|-----|------|----|------|----|
| 500 | 12 | 8,93 | 788 | 13,7 | 344 | 31,7 | 67 | 38,9 | 46 |
| 500 | 24 | 8,26 | 788 | 13,5 | 360 | 30,3 | 76 | 37,8 | 44 |
| 450 | 24 | 8,61 | 788 | 13,4 | 370 | 29,7 | 77 | 37,2 | 42 |
| | | 8,60 | 788 | | | | | | |

IV kordus = N-160 kg/ha

| | | | | | | | | | |
|-----|----|-------------|------------|------|-----|------|----|------|----|
| 500 | 12 | 6,05 | 755 | 14,3 | 389 | 33,4 | 69 | 32,9 | 48 |
| 500 | 24 | 7,75 | 768 | 13,6 | 362 | 30,3 | 79 | 33,9 | 42 |
| 450 | 24 | 8,05 | 776 | 13,6 | 347 | 31,2 | 70 | 34,3 | 43 |
| | | 7,28 | 766 | | | | | | |

EDVINS

| id tera/ m ² | Rea laius, cm | Saak 14 % niisku- sega, kg/ha | Mahu- mass, g/l | Proteiin (k.a), % | Lange- misarv, sek | Märg kleep- valk, % | Gluteen- indeks, % | 1000 tera mass (k.a), g | Zeleny arv, ml |
|----------------------------|---------------------|--|-----------------------|----------------------|--------------------------|------------------------------|--------------------------|----------------------------------|----------------------|
|----------------------------|---------------------|--|-----------------------|----------------------|--------------------------|------------------------------|--------------------------|----------------------------------|----------------------|

I kordus = N-106 kg/ha + NutribioN, 50 g/ha

| | | | | | | | | | |
|-----|----|-------------|------------|------|-----|------|----|------|----|
| 500 | 12 | 7,98 | 769 | 14,2 | 275 | 32,4 | 65 | 39,2 | 50 |
| 500 | 24 | 8,24 | 777 | 13,6 | 259 | 32,1 | 63 | 40,5 | 46 |
| 450 | 24 | 8,25 | 782 | 13,6 | 275 | 30,8 | 68 | 40,3 | 46 |
| | | 8,16 | 776 | | | | | | |

II kordus = N-106 kg/ha + NutribioN, 100 g/ha

| | | | | | | | | | |
|-----|----|-------------|------------|------|-----|------|----|------|----|
| 500 | 12 | 8,04 | 780 | 14,5 | 264 | 34,6 | 61 | 41,4 | 53 |
| 500 | 24 | 8,08 | 777 | 14,6 | 292 | 33,6 | 65 | 39,8 | 53 |
| 450 | 24 | 8,23 | 784 | 13,9 | 279 | 32,9 | 63 | 40,1 | 48 |
| | | 8,12 | 780 | | | | | | |

III kordus = N-160 kg/ha

| | | | | | | | | | |
|-----|----|-------------|------------|------|-----|------|----|------|----|
| 500 | 12 | 6,13 | 767 | 15,2 | 270 | 37,0 | 59 | 40,5 | 55 |
| 500 | 24 | 6,16 | 767 | 14,9 | 282 | 34,9 | 64 | 38,3 | 54 |
| 450 | 24 | 6,23 | 773 | 14,5 | 271 | 34,0 | 66 | 38,8 | 52 |
| | | 6,17 | 769 | | | | | | |

IV kordus = N-160 kg/ha

| | | | | | | | | | |
|-----|----|-------------|------------|------|-----|------|----|------|----|
| 500 | 12 | 5,30 | 760 | 15,5 | 295 | 37,4 | 64 | 37,8 | 57 |
| 500 | 24 | 5,06 | 728 | 15,8 | 304 | 37,0 | 70 | 32,3 | 57 |
| 450 | 24 | 5,62 | 746 | 15,0 | 294 | 35,2 | 68 | 34,4 | 54 |
| | | 5,33 | 745 | | | | | | |

KASUTATUD LÜHENDID / USED ABBREVIATIONS

Tabelites kasutatud lühendid

| | |
|------------------------|---|
| PD5% / LSD | piirdiferents vea tõenäosusega 5 % / least significant difference |
| id tera/m ² | idanevat tera ruutmeetri kohta / germinating seeds per m ² |
| TA/ha | toimeainet hektari kohta / level of active ingredient per hectare |
| 1-9 p | 1-9 palli / 1-9 points |
| k.a / d.m | kuivaine / dry matter |
| PTA / AFB | Põllumajandus- ja Toiduamet / Agriculture and Food Board |

Mulla šifrite selgitused (<https://www.riigiteataja.ee/akt/632692>)

| | |
|----------------|--|
| Kr | Koreserikas rähkmuld |
| KI | Leetjas muld |
| Klg | Gleistunud leetjas muld |
| LP | Kahkjäs leetunud muld |
| LP(g) | Kahkjäs leetunud gleistumistunnustega muld |
| G _o | Leostunud gleimuld |

PTA põldtunnustamise andmed:

<https://pta.agri.ee/pollumehele-ja-maaomanikule/taimekasvatus/seemned#poldtunnustamise-and>

Autoriõigus kuulub Maaelu Teadmuskeskusele, varalised õigused kuuluvad materjali tellijale. Materjal valmis Maaeluministeeriumi ning Põllumajanduse Registrate ja Informatsiooni Ameti (PRIA) tellimisel. Kõik autoriõigused on kaitstud.



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