

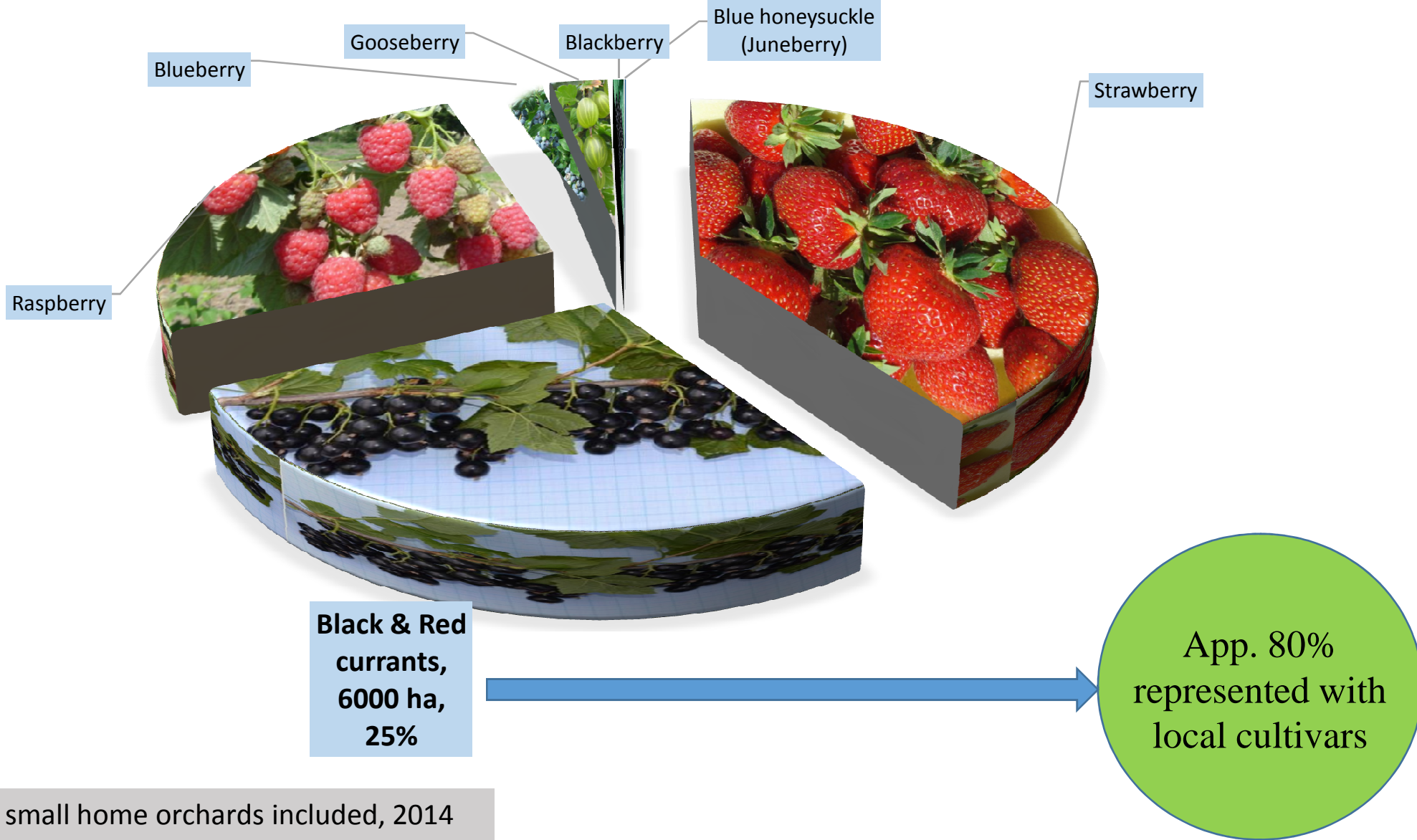


BLACK CURRANT BREEDING IN UKRAINE – RECENT ACHIEVEMENTS AND NEW DEMANDS

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Structure of small fruit crop plantations in Ukraine*



- official figure, small home orchards included, 2014

Climatic zones and BC breeding in Ukraine

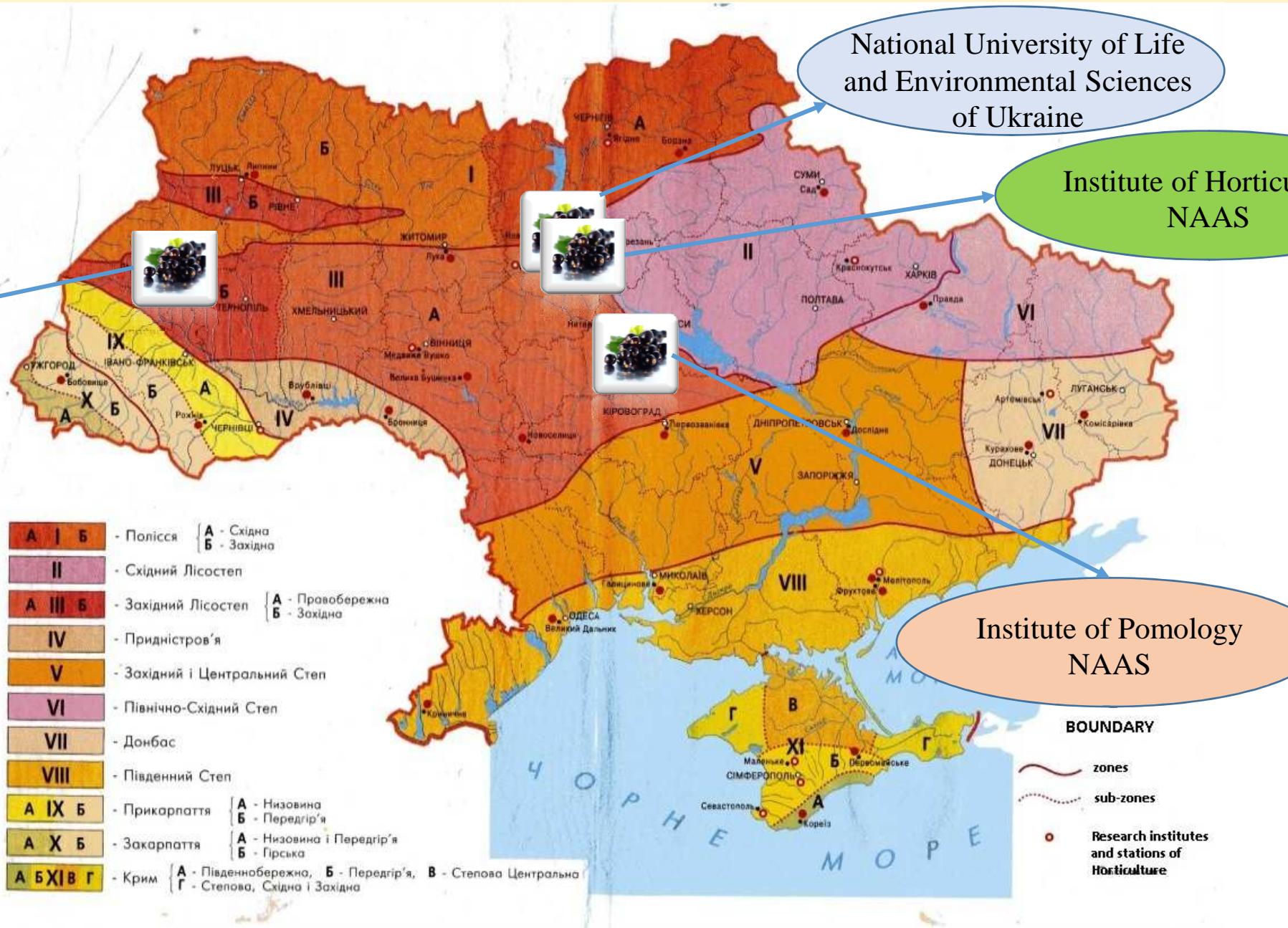
Currently
Research Centers
 form the black
 currant breeding
 programmes

Institute of Agriculture of
 Carpathian region NAAS

National University of Life
 and Environmental Sciences
 of Ukraine

Institute of Horticulture
 NAAS

Institute of Pomology
 NAAS



Ribes breeding at Institute of Horticulture NAAS

Breeding at IH NAAS from 1971

First release – 2 main varieties simultaneously (1987),
Maniuta are most popular

16 main varieties for over 40 years

5 varieties are successful commercially - now they
account for 80% UA production, there are some
plantings in EU

Important features – high agronomic
performance, resistance to fungal diseases,
fruit quality for both processing and fresh
market



Ribes breeding at IH NAAS – more varieties produced

- 1992 – 6 main varieties, **Chereshneva** is most popular
- 1994 – 7 main varieties, **Wernisazh** is most popular
- 1997 – 10 main varieties, **Sofiivska** is most popular
- 2001 – 13 main varieties, **Yuvileyna Kopania** is most popular
- 2006 – 14 main varieties, **Yuvileyna Kopania** is most popular
- 2011 – 16 main varieties, **Yuvileyna Kopania** still most popular
(cover up to 25% of plantings)
- 2015 – 16 main varieties, new popular cv - **Oriana**



Ribes breeding at other Research Centers of Ukraine

Institute of Pomology NAAS

Breeding at IP NAAS from 1930s
former “Mliiv Fruit Growing
Station”)

First release – **Cherkashchanka,
Pamyat Pravyka** (beginning of 1950s)

10 main varieties for over 80 years

4 varieties are relatively
successful commercially –
**Novost, Pamyat Pravyka, Musa
Lvova** now they account for 2% UA
production, no plantings abroad

Institute of Agriculture of Carpathian region NAAS

❖ Breeding at IACR NAAS from
1961 (former “Lviv Research
Horticultural Station”)

❖ First release – **Hutsulka, Novost
Prikarpatia** (1974)

❖ 10 main varieties for over 50
years

❖ 4 varieties are relatively
successful commercially –
**Novost Prikarpatia, Krasa
Lvova, Ukrainka, Lybid** – now
they account for 4-5% UA
production, no information about
plantings abroad

National University of Life and Environmental Science of Ukraine

❖ Breeding at NULES from 1961
(former “Ukrainian Agricultural
Academy”)

❖ First release – **Poltava-800**
(1980s)

❖ 7 varieties for over 30 years

❖ 1 main variety was relatively
successful commercially in 1990s - **Poltava-800**. Some are
popular on hobby market – **Ukrainka,
Kyivska** (very early cv)

CONVENTIONAL HYBRIDIZATION – still the main method in breeding programs (IH NAAS, 2015):



CONVENTIONAL HYBRIDIZATION – seedlings in glasshouse and on the trial plot (IH NAAS, 2015):



Promotion on "early stage" – familiarize growers and amateurs with ongoing breeding work at IH NAAS:



СЕЛЕКЦИЯ

ЧЕРНАЯ СМОРОДИНА КАК РОЖДАЕТСЯ

Елена ЖОГА

Особенности селекционной работы по созданию новых сортов смородины. Как происходит процесс отбора и выведения новых сортов. Почему важно вести селекцию на ранних этапах. Какими методами пользуются селекционеры. Почему важно вести селекцию на ранних этапах. Какими методами пользуются селекционеры.

44 Огород и Фрукты июль 2015

РУЧНАЯ РАБОТА

На полях садов и ягодников селекционеры проводят отбор и выведение новых сортов. Как происходит процесс отбора и выведения новых сортов. Почему важно вести селекцию на ранних этапах. Какими методами пользуются селекционеры.

Важно правильно выбрать сортовые органы

Александр Яценко, зам. директора по научной работе ИХ НААС

Обработанные кусты можно использовать в селекционной работе

СЕЛЕКЦИЯ

Инструменты для проведения опыления

Сорт Ориана обладает крупными красивыми ягодами с достаточным вкусом

Сортов Ориана обладают крупными красивыми ягодами с достаточным вкусом

46 Огород и Фрукты июль 2015

СЕЛЕКЦИЯ

Все сорта смородины имеют свои особенности

Важно правильно выбрать сортовые органы

Сорт Ориана обладает крупными красивыми ягодами с достаточным вкусом

СЕЛЕКЦИЯ

Важно правильно выбрать сортовые органы

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46 Огород и Фрукты июль 2015

What new within recent years?

Becoming popular in Ukraine...



ALAKTIKA (Breeder's number 99-19-17)

Parentage: Sofiiivska × Ukrainka (Zagadka × Ojebin)

Cropping season: Harvests 4-5 days before Yuvileyna Kopania
produces high yields in trials (11,5 t/ha).

Growth Habit: Reasonably upright with good vigour.

Fruit Quality: Berries are large (av.1,8 g) with excellent sensory qualities.

Disease and Pest Resistance: Resistant to mildew and leafspot. Slightly susceptible to gall mite.



DEBYUT (Breeder's number 99-20-18)

Parentage: Yuvileyna Kopania × Ukrainka (Zagadka × Ojebin)

Cropping season: Harvests slightly later than Yuvileyna Kopania
produces very high yields in trials (16,4 t/ha).

Growth Habit: Semi-spreading habit with good vigour.

Fruit Quality: Berries are large (av.1,9 g). Juice quality is good overall.

Disease and Pest Resistance: Resistant to mildew and leafspot. Slightly susceptible to gall mite.

What new within recent years?

Becoming popular in Ukraine...



POLTAVA 584

Parentage: Poltava 800 × Titania

Cropping season: Harvests at the same time as Yuvileyna Kopania.

Produced high yields in trials (13,5 t/ha).

Growth Habit: Reasonably upright with good vigour.

Fruit Quality: Berries are large (av. 1,8 g) and shiny.

Disease Resistance: Field resistance to mildew and leafspot.



SERZH

Parentage: Belorusskaya sladkaya × Zagadka

Cropping season: Harvests 4 days before Yuvileyna Kopania. Has produced high yields in trials (13 t/ha).

Growth Habit: Upright with good vigour.

Fruit Quality: Berries are medium (av. 1,3 g) with good firmness.

Disease and Pest Resistance: Field resistance to mildew and leafspot.



PRESTIZH

Parentage: # 46 × Smila

Cropping season: Harvests 5 days before Yuvileyna Kopania. Has produced high yields in trials (14,8 t/ha).

Growth Habit: Upright with good vigour.

Fruit Quality: Berries are large (>2 g) with good sensory qualities.

Disease and Pest Resistance: Resistant to mildew and leafspot, slightly susceptible to leafspot.

Actual growers and market demands to new bc varieties

- **superior /stable by years agronomic performance** > 12 t/ha
- **suitability to organic / low-input growing** – exceptional resistance to fungal deceases and some pests
 - growers aspire to reduce their expanses
- **environmental resilience / adaptability** – extention of bc growing geography
- **late and very late new varieties** – extension of harvesting period
- **dessert type varieties for fresh consumption** – extension of sales opportunities
 - large, shiny, attractive berries more important that their dessert taste))



New release – IHK 01-1-9 (Yuvileina-2)

Parentage: Yuvileyna Kopania × 88-14-16 (Pamiaty Vavilova × Titania)

Cropping season: Harvests at the same time with Yuvileyna Kopania (mid-late)

Has produced very high yields in trials (18 t/ha).

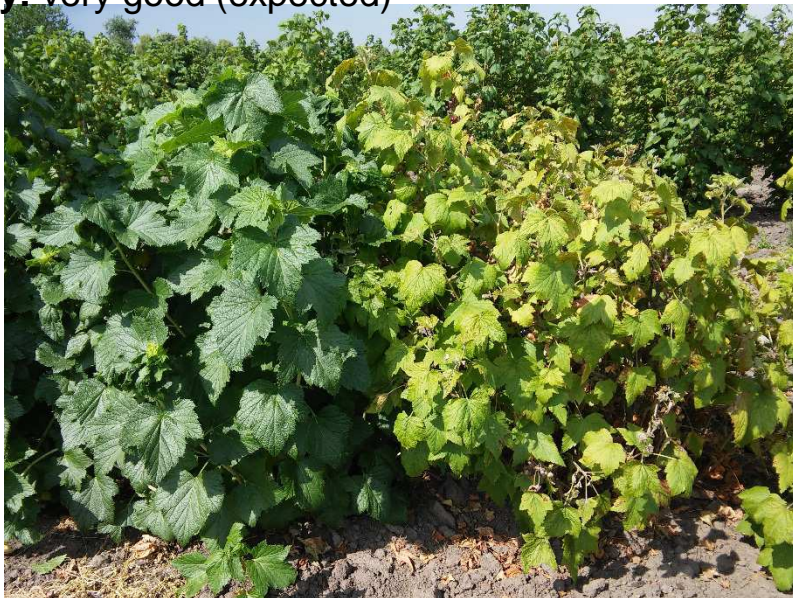
Growth Habit: Reasonably upright with good vigour.

Fruit Quality: Berries are large (av. 1,8 g) with good firmness, av. Brix level of 15.4, AcA 180-190 mg/100 g

Disease and Pest Resistance: Exceptional resistance to mildew and leafspot, rust and tolerance to gall mite.

Adaptability: very good (expected)

REAL
ANTI-STRESS
HERO!



New release – IHK 99-20-16 (Yednist)

Parentage: Yuvileyna Kopania × Ukrainka (Zagadka × Ojebin)

Cropping season: Harvests 6 days before Yuvileyna Kopania (early-mid)

Has produced high yields in trials (14,8 t/ha).

Growth Habit: Semi-spread with good vigour.

Fruit Quality: Berries are medium-large (av.1,6 g) with good taste,

av. Brix level of 14.1, AcA 145 mg/100 g

Disease and Pest Resistance: Resistant to mildew, slightly susceptible to leafspot and gall mite.



New release – Upiter

Parentage: 1649 × Nadiya

Cropping season: Harvests 4 days later Yuvileyna Kopania (late)

Has produced high yields in trials (17 t/ha).

Growth Habit: Semi-spread with good vigour.

Fruit Quality: Berries are large (av.1,8 g) with good taste,

av. Brix level of 14.9, AcA 160 mg/100 g

Disease and Pest Resistance: Resistant to mildew and leafspot



Fresh Market Types by IH NAAS

IHK 03-36-4

- early-mid
- large (2,0 g) and attractive shiny berries
- very pleasant sensory qualities



IHK 06-1-6 (Primana)

- mid-late
- large (1,8 g) berries
- outstanding taste – *the testiest blackcurrant I ever tried!*
- excellent resistance to fungal diseases
- good storage potential



Thank you for attention!



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