

Sowing is the beginning of our journey together. With the same goal. A rich harvest and your pleasure. That's why we're here. Despite everything.

Your Agricultural Institute Osijek



#### Dear producers,

ith this catalogue we would like to introduce you to the varieties and hybrids of Agricultural Institute Osijek. Agricultural Institute Osijek is located at the southern end of the Pannonian Plain (45°32 N; 18°44 E), in the city of Osijek, Republic of Croatia. Since its foundation in 1878 up until today, Agricultural Institute Osijek has been recognized for its scientific and research work in the field of biotechnical sciences, especially through its plant breeding, genetics and seed production activities.

#### Maize Hybrids

Tradition of maize breeding at the AIO is over 80 years long. Our first registered hybrid dates back to 1964. Throughout that period, several generations of breeders, highly valued in Croatia and beyond, combined their efforts and knowledge in various maize breeding programs. So far, the work of maize breeders at the Agricultural Institute Osijek has resulted in the registration more than 180 hybrids with a wide set of production and other purposes (grain/ear production, plant and grain silage, food industry and other fields): Today we have a series of hybrids in FAO groups 100-600, meeting strict criteria for high and stable grain and silage yields as well as high tolerance to common diseases and pests. Excellent adaptability to various growing conditions has always been a prominent feature of our hybrids, and today, with our extensive knowledge and new technologies, this feature is even more notable.

#### **Soybean Varieties**

For over 50 years of intensive and continuous work, soybean breeders of Agricultural Institute Osijek have created varieties of adequate agronomic performance according to the needs of producers, industry and consumers in the frame of maturity groups from 00 to II. Development of varieties with improved grain yield and quality, wider adaptability and higher stability, high tolerance to the most

prominent diseases, high tolerance to lodging and pod shattering, detection of existing and creation of new biotic and abiotic stress tolerant varieties with improved economic characteristics, development of new varieties with higher biological fixation of nitrogen are directions of our breeding work. Genetic improvement of OS soybean varieties has been accomplished exclusively using the conventional breeding strategies, resulting in non-genetically modified varieties.

#### Wheat varieties

Wheat breeding at Agricultural Institute Osijek began in 1931. In 88 years of continuous and dedicated work, winter wheat breeders of Agricultural Institute Osijek have created a total of 150 winter wheat varieties registered in the Republic of Croatia and more than 70 winter wheat varieties registered internationally (Italy, Hungary, Albania, Romania, Turkey, Slovenia, Serbia, Bosnia and Herzegovina, Macedonia, Kosovo). Winter wheat varieties created at Agricultural Institute Osijek are characterized by high grain vield potential, earliness, high and stable hectoliter weight, advanced stability and adaptability proved in different environmental and production conditions, as well as by very good and good flour and bread making quality, and they largely meet the requirements of wheat producers, seed processors, milling and baking industry and consumers over the world.

#### **Barley varieties**

For the past eight decades, major significance at Agricultural Institute Osijek has been placed on its breeding and seed production program for winter and spring barley with two-rowed spikes, intended for beer and malt industry, animal husbandry and direct human nutrition. So far, the work of barley breeders at Agricultural Institute Osijek has resulted in the registration of 122 barley cultivars in the Republic of Croatia, 61 of which are two-rowed winter barley cultivars, 19 are six-rowed winter barley cultivars, and 42 are spring malting barley cultivars. The characteristics of OS barley cultivars are short and strong stem, very good or excellent lodging resistance, tolerance to typical barley diseases with a high spikes/m<sup>2</sup> potential, and heading time (length of vegetation) adapted to barley production conditions in South East Europe.

#### **Forage Crops Varieties**

The program of forage crops breeding is conducted for over half a century at the Agricultural Institute Osijek. The aim of forage crops breeding is to create high-yield varieties with nutritional value, adaptable to different agro-ecological conditions and tolerant to the most widespread diseases and pests. The breeding program includes perennial small-grained legumes, alfalfa and red clover as the most important forage crops for livestock roughage, and annual legumes, winter peas for haylage or silage and spring pea for grain production. The result of forage crops breeding is 20 registered varieties of alfalfa, two varieties of red clover, two varieties of winter peas and two varieties of spring peas. Forage legumes are an irreplaceable part of a sustainable and market competitive agricultural production.

All of the varieties and hybrids presented in this catalogue are also included in the EU Common Catalogue of varieties of agricultural plant species, and they were created by conventional breeding methods – GMO free.

We believe that our breeding programs, as well as our scientific and research work in the field of breeding, genetics, seed production, and crop production, with the aid of well-equipped laboratories for quality testing at Agricultural Institute Osijek, will develop even further in the future and be able to respond to any requirements set by the markets of industry, animal husbandry and human nutrition.

We are convinced that we will be able to continue providing you with newly-recognized varieties and hybrids of improved characteristics related to yield, yield stability, as well as improved end-use quality.

We hope that this catalogue, which describes the basic characteristics of Agricultural Institute Osijek varieties and hybrids, will help you select varieties and hybrids that are suitable for your production demands and growing conditions.

We are looking forward to a successful mutual collaboration.

Sincerely, Agricultural Institute Osijek

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#### **OS MAIZE** HYBRIDS

# **OS 3114**

#### **FAO 330**

HYBRID FOR SOWING AS FIRST CROP AND AS STUBBLE CROP

#### **BASIC PROPERTIES**

- Purpose: dry grain
- Kernel type: dent-type
- Number of rows of kernels: 16 - 18
- Recommended plant germinable seeds/ha, 44.000 - 46.000 germinable seeds/cadastral
- Sowing: 18 19 cm apart











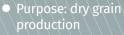
- Since becoming widely produced, it has recorded great production results in almost all localities in Croatia, as well as in Slovenia, Hungary, Romania and other countries
- ► Medium-height, robust stalk with lush leaves, characterized by high tolerance to lodging

- ► Medium-sized ears, compact and positioned at a medium height
- ► Due to its relatively short vegetation period and fast kernel dry-down during maturation, other than being suitable as a hybrid for sowing as first crops, it is also very suitable as a hybrid for early sowing of stubble crops when, during normal years (without weather extremes such as early frost, etc.), maturation occurs prior to the onset of low temperatures; the yield is then similar to the first crop

#### **OS MAIZE** HYBRIDS



#### BASIC PROPERTIES





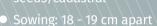
Kernel type: dent-type



Number of rows



Recommended plant 44.000 - 4<u>6.000 germinabl</u>e



**OS 378** 

**FAO 350** 

#### **GOOD ADAPTABILITY**

- ► A hybrid primarily used for dry grain production
- ► Characterized by high germinability and germination rate, as well as by rapid and balanced initial growth
- ► Suitable for the earliest sowing dates and regularly producing stable and (for its FAO group) high grain
- ▶ It has a short, firm and robust stalk that is exceptionally resistant to lodging and a branched root system
- ► Shorter cylindrical ears, positioned at a medium height and closely to the stalk
- ► Very high tolerance to the most common diseases and adaptable to various soil and climate production conditions
- ▶ It displays particularly high tolerance to drought and high air temperatures during pollination and grain filling periods

**OS 398** 

#### **FAO 390**

HYBRID FOR DELAYED **SOWING OR SOWING** AS STUBBLE CROP

#### **BASIC PROPERTIES**

- Purpose: dry grain production, ear harvesting and silage
- Kernel type: dent-type
- Number of rows of kernels: 16 - 18
- Recommended plant density: 75.000 - 79.000 germinable seeds/ha, 44.000 - 46.000 germinab seeds/cadastral
- Sowing: 18 19 cm apart















- ► Suitable for the earliest sowing dates; it produces stable yields in various production conditions
- ► Within its FAO group, it stands out with its tall, robust and leafy stalk with low-positioned and medium large cylindrical ears
- ► Excellent tolerance to common diseases and pests and excellent tolerance to drought conditions

- ▶ Deep and branched roots enable the supply of the plant with water and nutrients even in case of water shortage and on soils of poor physical and chemical properties
- ► Exceptionally adaptable to various production conditions
- ▶ When sowed in somewhat denser stands. it regularly produces very high grain yields
- ▶ Due to its tall and robust stalk, it is regularly used for early silage production or, in case of delayed sowing or sowing of stubble crop, as a silage-specific hybrid

#### **OS MAIZE** HYBRIDS



#### **BASIC PROPERTIES**

- Purpose: dry grain production, ear harvesting, silage production
- Kernel type: dent-type
- Number of rows of kernels: 16 - 18
- Recommended plant 41.000 - 44.000 germinab
- Sowing: 19 20 cm apart











# **DRAVA 404**

#### **FAO 420**

#### UNIVERSAL PURPOSE IN ALL CULTIVATION AREAS

- ► Hybrid with three purposes: dry grain production due to fast kernel dry-down during maturation, high moisture corn production due to large and highquality kernels and whole plant silage production due to great plant mass and excellent plant mass/
- ► Tall, firm, intensely green and leafy stalk with tolerance to lodging

- ► Large and cylindrical ears, closed at the top
- ► High germinability and germination rate and very high resistance to the most common diseases and pests
- ▶ Due to its universal purpose, this hybrid has been used in equal measure in all production areas in Croatia

# **KULAK**

#### **FAO 450**

#### THF "KULAK" OF **HYBRIDS**

#### **BASIC PROPERTIES**

- Purpose: dry grain production, ear harvesting silage production
- Kernel type: dent-type
- Number of rows of kernels: 16 - 18
- Recommended plant density: 71.000 - 75.000 germinable seeds/ha. 41.000 - 44.000 germinab
- Sowing: 19 20 cm apart















- ► One of the most sought-after OS maize hybrids from the selection programme of the Agricultural Institute Osijek
- ▶ Due to its qualities, it is becoming more widespread in Croatia and abroad
- ▶ It produces stable and high yields for all production purposes; it can thus be used for silage production and ear harvesting, but its most common purpose is kernel harvesting
- ► Kernels have a deep reddish base and are characterized by fast dry-down
- ► It has a medium-height elastic stalk with

- large leaves of excellent resistance, as well as deep and branched roots, which make it exceptionally resistant to lodging
- ► Medium large, upright and regular-tipped
- ► Increased tolerance to unfavourable climate conditions (water shortage and high air temperatures)
- ► Excellent adaptability to various production conditions
- ► A hybrid that consistently produces better results than all other competitive hybrids in Croatia and a number of other countries

#### **OS MAIZE** HYBRIDS



#### **BASIC PROPERTIES**

- Purpose: dry grain production, ear harvestir silage production
- Kernel type: dent-type
- Number of rows of kernels: 16 - 18
- Recommended plant













**OS 4014** 

**FAO 450** 

#### FOR GRAIN AND EARLY SILAGE PRODUCTION

- ► A new hybrid from the mid-FAO 400 group whose basic purpose is grain production; however, due to its tall, leafy and robust stalk, it has achieved impressive results in early silage production
- ▶ It is characterized by high germination rate and germinability (high vigour) and expressed kernel drydown during maturation
- ▶ It has a medium-height, robust stalk with lush leaves and high tolerance to lodging

- ▶ Deep and branched roots with great absorption
- ► Large cylindrical ears positioned at medium height with deep high-quality kernels; an exceptionally good ear/stalk ratio gives it an advantage in silage production over other competitive hybrids
- ► It has displayed great adaptability to various climate and soil production conditions and is suitable for cultivation in all production areas in Croatia

#### **FAO 450 TOMASOV**

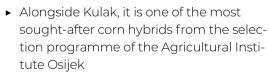
#### HIGH TOI FRANCE TO UNFAVOURABLE CONDITIONS

#### **BASIC PROPERTIES**

- Purpose: dry grain production, ear harvesting silage production
- Kernel type: dent-type
- Number of rows of kernels: 14 - 16
- Recommended plant density: 71.000 - 75.000 germinable seeds/ha, 41.000 - 44.000 germinab seeds/cadastral
- Sowing: 19 20 cm apart







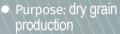
- ► This hybrid is a true representative of the new generation of high-yield and highstability hybrids
- ► It is very similar to Kulak in terms of grain production, which is the basic purpose of this hybrid, but it displays a somewhat higher tolerance to unfavourable climate and soil production conditions (water short-

- age, high air temperatures, low quality soil)
- ► It has a firm stalk with large leaves and large, regular-tipped and low-positioned ears with regular-shaped reddish-based kernels
- ▶ It is characterized by a slightly taller stalk than Kulak, as well as a deep, branched root system which allows better absorption of water and nutrients
- ▶ With intensive crop management and in optimal weather conditions. Tomasov will achieve excellent grain yields

#### **OS MAIZE** HYBRIDS



#### **BASIC PROPERTIES**





Kernel type: dent-type kernel



Number of rows of kernels: 16 - 18



 Recommended plant germinable seeds/ha, 41.000 - 44.000 germinab seeds/cadastral



Sowing: 19 - 20 cm apart

# **FILIGRAN**

#### **FAO 490**

#### THE NEWEST HYBRID OF THE AGRICULTURAL INSTITUTE OSIJEK

- ► Hybrid for all production purposes; its basic purpose is kernel harvesting
- ► Since its introduction, it has produced excellent grain yields, which is why it has become a favourite of agricultural producers across Croatia within a short period
- ► Medium large to large ears
- ► Medium-height stalk with a large number of erect leaves
- ► High resistance to the most common diseases
- ► Characterized by wide adaptability to various soil and climate production conditions

#### **OS MAIZE** HYBRIDS

## LILA

#### **FAO 660**

#### IDEAL CHOICE FOR SILAGE AND BIOGAS **PRODUCTION**

#### **BASIC PROPERTIES**

- Purpose: dry grain production, ear harvesting, silage production silage and biogas production
- Kernel type: dent-type
- Number of rows of kernels: 18 - 20
- Recommended plant density: 65.000 - 68.000 38.000 - 39.000 germinab seeds/cadastral
- Sowing: 21 22 cm apart













- A newer maize hybrid whose basic purpose is silage or biogas production
- ► In the last few years, it has produced stable and above-average yields, which is why it has become a favourite of agricultural producers in Croatia and abroad
- ► Thanks to its excellent adaptability to various production conditions, Lila is cultivated in all parts of Croatia
- ► Tall, robust and firm stalk with a greater number of large leaves characterized by an extended stay-green period
- ► Large, high-positioned ears
- ► Very deep and branched roots
- ► Due to its large plant mass and large ears with higher-quality kernels, Lila is the preferred option for silage production for domestic animal feed

#### **OS MAIZE** HYBRIDS



#### **BASIC PROPERTIES**

- Purpose: dry grain silage production
- Kernel type: dent-type
- Number of rows of kernels: 16 - 18
- Recommended plant 39.000 - 41.000 germinabl













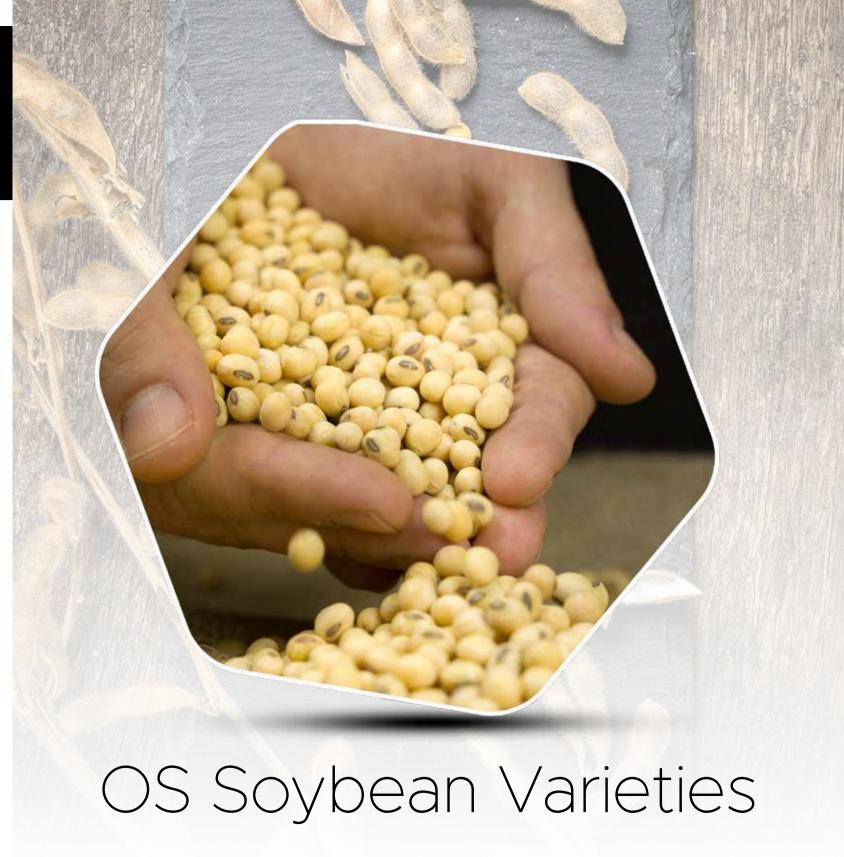
# **RUDOLFOV 60**

#### **FAO 660**

#### **NEW GENERATION OF SILAGE HYBRIDS**

- ▶ Newer hybrid in the FAO 600 group which stands out with record yields in its FAO group
- ► Its basic purpose is whole-plant or grain silage pro-
- ► Medium-height, leafy, robust stalk, somewhat shorter than the stalk of the OSSK 635 and Lila hybrids
- ► Large and regularly formed deep and branched roots with high resistance to lodging
- ► Excellent adaptability and possibility of sowing in denser stands (for this FAO group) are this hybrid's advantages with respect to stable silage production, as well as grain production in Eastern production





#### **OS SOYBEAN** VARIETIES

# **IKA**

0-I (MEDIUM EARLY)

#### **BASIC PROPERTIES**

MATURITY GROUP
0-I (medium early)

FLOWER COLOUR

Purple

PUBESCENCE COLOUR

Grey

HILUM COLOUR

Yellow

PLANT HEIGHT

Medium height

TOLERANCE TO LODGING

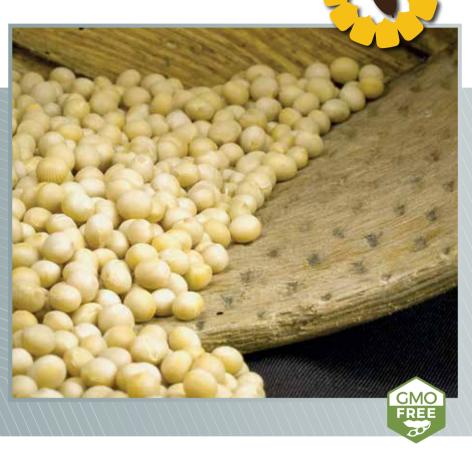
Resistant

RESISTANCE TO DISEASES

Very hig

ADAPTABILITY

Very wide



#### SOWING

SOWING SEASON	Apri
SOWING RATE	100 - 120 kg/ha
RECOMMENDED PLANT DENSITY	580 - 600.000 plants/ha

#### **QUALITY AND YIELD**

YIELD POTENTIAL	Over 5 t/ha
PROTEIN CONTENT	39-41%
OIL CONTENT	20-22%

- ➤ The most sought-after and widespread soybean variety in Croatian planting areas;
- ► Rapidly spreading on foreign markets;
- ► Purple flowers;
- ► Medium early variety;
- ► Exceptional stability;
- ► High yield and high quality.

#### **OS SOYBEAN VARIETIES**



#### **BASIC PROPERTIES**

MATURITY GROUP 0-I (medium early) FLOWER COLOUR Purple PUBESCENCE COLOUR Grey HILUM COLOUR Yellow PLANT HEIGHT Medium height TOLERANCE TO LODGING Excellent RESISTANCE TO DISEASES High ADAPTABILITY Wide

# **TENA**

#### 0-I (MEDIUM EARLY)

- ► Robust and firm stalk;
- ► Optimal height of the first pod-bearing node;
- ► Large and strong pods resistant to pod shattering;
- ► Suitable for cultivation on all soil types;
- ► Produces high yields even in modest crop management conditions.

#### SOWING

April	SOWING SEASON
100 - 120 kg/ha	SOWING RATE
580 - 600.000 plants/ha	RECOMMENDED PLANT DENSITY

#### **QUALITY AND YIELD**

YIELD POTENTIAL	Over 5 t/ha
PROTEIN CONTENT	40 - 41%
OIL CONTENT	21 - 23%

# **OS ZORA**

0-I (MEDIUM EARLY)

#### **BASIC PROPERTIES**

MATURITY GROUP 0-I (medium early)

FLOWER COLOUR

Purple

PUBESCENCE COLOUR

HILUM COLOUR

Yellow

PLANT HEIGHT

Medium height

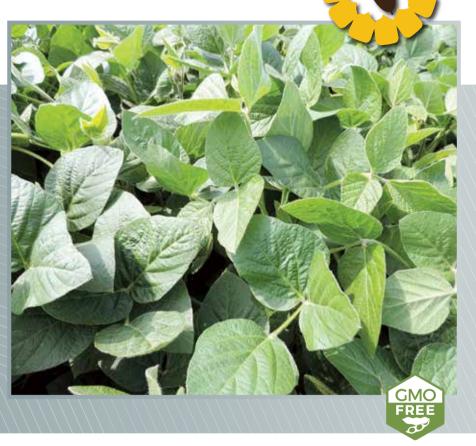
TOLERANCE TO LODGING

Resistant

RESISTANCE TO DISEASES

Very hig

**ADAPTABILITY** 



#### SOWING

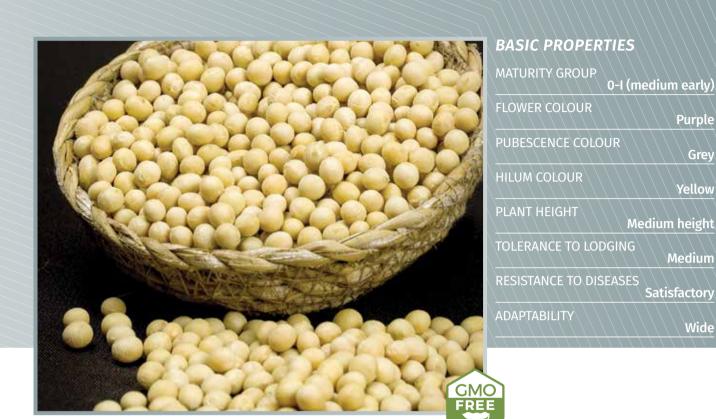
SOWING SEASON	April
SOWING RATE	100 - 120 kg/ha
RECOMMENDED PLANT DENSITY	580 - 600.000 plants/ha

#### **QUALITY AND YIELD**

YIELD POTENTIAL	Over 5 t/ha	
PROTEIN CONTENT	39-41%	
OIL CONTENT	21–23%	

- ► Greater height of the first pod-bearing node, which reduces losses during harvest;
- ► High resistance to the most common diseases, particularly downy mildew;
- ► High and stable grain yields;
- ▶ It achieves good results even on soils with poorer structure and fertility, as well as in drought conditions.

#### **OS SOYBEAN VARIFTIFS**



# **SARA**

#### 0-I (MEDIUM EARLY)

- ► A newer variety from the selection programme of the Agricultural Institute Osijek;
- ► High and stable yields;
- ► High-quality grains, particularly in terms of oil
- ► Suitable for various production conditions;
- ► Excellent cultivation properties.

#### SOWING

April	SOWING SEASON
100 - 120 kg/ha	SOWING RATE
580 - 600.000 plants/ha	RECOMMENDED PLANT DENSITY

Purple

Grey

Yellow

Wide

#### **QUALITY AND YIELD**

YIELD POTENTIAL	Over 5 t/ha
PROTEIN CONTENT	Up to 41%
OIL CONTENT	22 - 24%

# **OS ĐURĐICA**

0-I (MEDIUM EARLY)

#### **BASIC PROPERTIES**

MATURITY GROUP 0-I (medium early)

FLOWER COLOUR

Purple

PUBESCENCE COLOUR

HILUM COLOUR PLANT HEIGHT

Light brown

Medium height

TOLERANCE TO LODGING

Very high

RESISTANCE TO DISEASES

Very high

ADAPTABILITY



#### SOWING

SOWING SEASON	April
SOWING RATE	100 - 120 kg/ha
RECOMMENDED PLANT DENSITY	580 - 600.000 plants/ha

#### **QUALITY AND YIELD**

YIELD POTENTIAL	Over 4,5 t/ha
PROTEIN CONTENT	43-45%
OIL CONTENT	21–23%

- ► The new variety from the selection programme of the Agriculture Institute Osijek;
- ► Medium early variety;
- ► Purple flowers;
- ► High and stable yields;
- ► High-quality grains, particulary in terms of protein content;
- ► Excellent adaptability to various cultivation conditions.

#### **OS SOYBEAN VARIFTIFS**



# **SUNCE**

#### 0-I (MEDIUM LATE)

- ► The newest variety from the selection programme of the Agricultural Institute Osijek;
- ► High and stable yield of high-quality grains, particularly in terms of protein content;
- ► Very good adaptability to various soil conditions;
- ► Excellent drought tolerance and resistance to the most common diseases.

#### **SOWING**

VING SEASON	April
VING RATE	115 - 125 kg/ha
COMMENDED PLANT DENSITY	580 - 600.000 plants/ha

White

Grey

Light brown

Very high

Wide

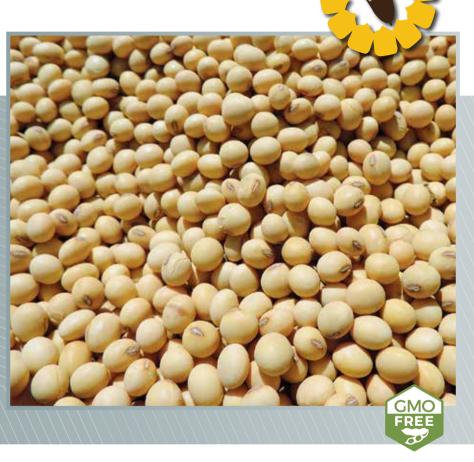
#### **OUALITY AND YIELD**

/IELD POTENTIAL	Over 5 t/ha
PROTEIN CONTENT	41 - 42%
DIL CONTENT	21 - 23%

# **SONJA**

O (EARLY)

# BASIC PROPERTIES MATURITY GROUP 0 (early) FLOWER COLOUR Purple PUBESCENCE COLOUR Grey HILUM COLOUR Light brown PLANT HEIGHT Medium height TOLERANCE TO LODGING Tolerant RESISTANCE TO DISEASES Medium ADAPTABILITY Very wide



#### SOWING

SOWING SEASON	Late April - mid May
SOWING RATE	120 - 135 kg/ha
RECOMMENDED PLANT DENSITY	600 - 650.000 plants/ha

#### **QUALITY AND YIELD**

YIELD POTENTIAL	Over 4 t/ha
PROTEIN CONTENT	41 - 43%
OIL CONTENT	21 - 23%

- ► A newer variety from the product range of the Agricultural Institute Osijek;
- ► Firm stalk that is resistant to lodging;
- ► Excellent adaptability to various cultivation conditions:
- ► Exceptional tolerance of drought conditions in production;
- ► High-quality grains, particularly in terms of protein content.

#### **OS SOYBEAN VARIETIES**



# **TOMA**

#### O (EARLY)

- ► High genetic potential for high yields and highquality grains;
- ► Stability and wide adaptability;
- ► Tolerance to lodging and satisfactory resistance to the most common diseases;
- ► Suitable for sowing in all soybean cultivation areas;
- Suitable for delayed sowing.

#### SOWING

April - May	SOWING SEASON
120 - 135 kg/ha	SOWING RATE
600 - 650.000 plants/ha	RECOMMENDED PLANT DENSITY

0 (early)

Purple

Grey

Yellow

Medium height

Very tolerant

Medium

#### **QUALITY AND YIELD**

YIELD POTENTIAL	Over 4 t/ha
PROTEIN CONTENT	40 - 42%
OIL CONTENT	20 - 22%

#### **OS SOYBEAN** VARIFTIFS

# **LUCIJA**

00-0 (VERY EARLY)

#### **BASIC PROPERTIES**

MATURITY GROUP 00-0 (very early)

FLOWER COLOUR

Purple

PUBESCENCE COLOUR

HILUM COLOUR

Dark brown

PLANT HEIGHT

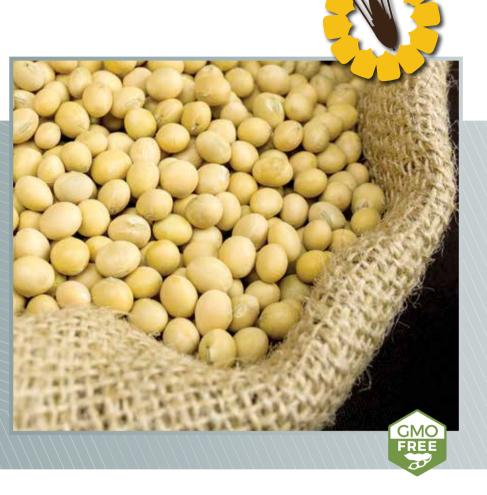
**ADAPTABILITY** 

Medium height

TOLERANCE TO LODGING Very tolerant

RESISTANCE TO DISEASES

Mediur



#### SOWING

SOWING SEASON	Late April - mid May
SOWING RATE	135 - 145 kg/ha
RECOMMENDED PLANT DENSITY	600 - 700.000 plants/ha

#### **QUALITY AND YIELD**

YIELD POTENTIAL	Over 4 t/ha
PROTEIN CONTENT	Up to 42%
OIL CONTENT	21 - 23%

- ► High ratio of four-bean pods;
- ► Tolerant to stress caused by high temperatures during pollination and grainfilling periods;
- ► Rapid and balanced growth even in colder springs and on heavy soils;
- ► Suitable for both regular and delayed sowing.

#### **OS SOYBEAN VARIETIES**



#### **BASIC PROPERTIES**

MATURITY GROUP 00-0 (very early) FLOWER COLOUR Purple PUBESCENCE COLOUR Yellow HILUM COLOUR Dark brown PLANT HEIGHT Medium height TOLERANCE TO LODGING Tolerant RESISTANCE TO DISEASES Medium ADAPTABILITY

# **EMA**

#### 00-0 (VERY EARLY)

- ► A newer variety from the product range of the Agricultural Institute Osijek;
- ► Rapid and balanced initial growth;
- ► Stalk tolerant to lodging;
- ► Excellent resistance to the most common diseases;
- ► Suitable for regular sowing in western Croatia and for regular and delayed sowing in eastern Croatia.

#### SOWING

SOWING SEASON	May - June
SOWING RATE	140 - 145 kg/ha
RECOMMENDED PLANT DENSITY	650 - 700.000 plants/ha

#### **QUALITY AND YIELD**

YIELD POTENTIAL	Over 4,5 t/ha
PROTEIN CONTENT	Up to 41%
OIL CONTENT	Up to 22%

# **OS NEVENA**

00-0 (VERY EARLY)

#### BASIC PROPERTIES

MATURITY GROUP 00-0 (Very early)

FLOWER COLOUR

Purple

PUBESCENCE COLOUR

Grey

HILUM COLOUR

Light brown

PLANT HEIGHT

Medium heigh

TOLERANCE TO LODGING

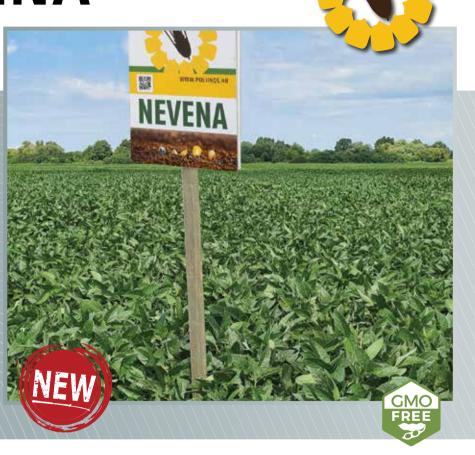
Very high

RESISTANCE TO DISEASES

Mediun

ADAPTABILITY

Wide



#### **SOWING**

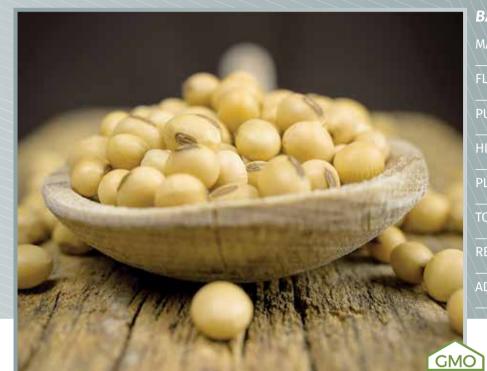
SOWING SEASON	May - June
SOWING RATE	120 - 130 kg/ha
RECOMMENDED PLANT DENSITY	600 - 650.000 plants/ha

#### **QUALITY AND YIELD**

YIELD POTENTIAL	Over 4 t/ha
PROTEIN CONTENT	Up to 43%
OIL CONTENT	22-23%

- ► The new variety from the selection programme of the Agriculture Institute Osijek;
- Very early variety;
- ► Purple flowers;
- ➤ Suitable for regular sowing in western Croatia and for regular and delayed sowing in eastern Croatia:
- ► Tolerant to stress caused by high temperatures during pollination and grain-filling periods;
- ► High ratio of four-bean pods;
- ► Very narrow leaves.

#### **OS SOYBEAN VARIETIES**



#### BASIC PROPERTIES

MATURITY GROUP

PLOWER COLOUR

PUBESCENCE COLOUR

HILUM COLOUR

PLANT HEIGHT

Medium height

TOLERANCE TO LODGING

Highly tolerant

RESISTANCE TO DISEASES

Exceptional

ADAPTABILITY

Wide

# **KORANA**

#### 00 (VERY EARLY)

- ► The earliest soybean variety from the selection programme of the Agricultural Institute Osijek;
- ► Extremely high grain yields;
- ► Optimal height of the first pod-bearing node;
- ► Strong pods resistant to pod shattering;
- ► Due to a shorter vegetation period, it is suitable for delayed sowing and sowing of stubble crop, where it achieves notable results.

#### **SOWING**

SOWING SEASON	May - June
SOWING RATE	135 - 145 kg/ha
RECOMMENDED PLANT DENSITY	700 - 750.000 plants/ha

#### **QUALITY AND YIELD**

YIELD POTENTIAL	Over 4 t/ha
PROTEIN CONTENT	Up to 42%
OIL CONTENT	22 - 23%

# Alfalfa

#### **OS FORAGE** CROPS



#### **BASIC PROPERTIES**

LENGTH OF VEGETATION PERIOD:

medium late variety

SOWING SEASON:

mid - March or early September

AVERAGE YIELD:

> 16 t/ha of dry matter

ABSOLUTE WEIGHT

1.8 - 2.1 g

RECOMMENDED PLANT DENSITY: 350 - 400 plants/m²

**OS 66** 

#### **PURPOSE: HAY PRODUCTION**

Synthetic cultivar developed from selected types of Pannonian alfalfa and certain European cultivars. Its longevity and leaf ratio have been increased through breeding. Plants are of medium height, erect and have a robust stalk. The majority of plants have light purple and medium purple flowers, with a lower ratio of dark blue flowers. It is extremely tolerant to drought conditions and has a medium-fast rate of regrowth after mowing. It is the best-known and most widespread cultivar in Southeast Europe.

#### **OS FORAGE** CROPS

OSJEČKA 99

PURPOSE: HAY PRODUCTION

#### **BASIC PROPERTIES**

LENGTH OF VEGETATION PERIOD: medium early variety

SOWING SEASON:

mid - March or early September

AVERAGE YIELD:

> 3.5 t/ha of protein

ABSOLUTE WEIGHT:

1.9 g

RECOMMENDED PLANT DENSITY: 350 - 400 plants/m



Alfalfa cultivar in production only for the Croatian market. It is characterized by a tall, medium thin stalk which is resistant to lodging and has a good leaf/stalk ratio. Plants are dark green and have a higher ratio of dark purple flowers. It is tolerant to intensive mowing, drought and low temperatures. It produces high yields of hay ( $\geq$  20 t/ha) of extremely high quality and with high protein content – about 23% in dry matter.



#### **OS FORAGE** CROPS

# **ADAM**

#### NEW WINTER PEAS VARIETY

#### **BASIC PROPERTIES**

SOWING SEASON:

10 - 25 October

HARVESTING SEASON:

10 - 20 May (blooming and first pod formation phase)

YIELD:

around 60 t/ha of green matter (DM content 16 - 18%)

PROTEIN CONTENT IN DM:

18 - 20%

RECOMMENDED PLANT DENSITY:
1 - 1.2 million plants per hectare

SEEDING RATE:

150 kg of peas + 50 kg of cerea



- Medium-early variety
- ► Intended for the production of coarse fodder with a high nutritional value
- Used as a ruminant feed in the form of hay and haylage; significantly increases milk production and quality in dairy cows due to its quality
- ► Ensures economically profitable and environmentally friendly production
- ► Sown together with winter cereals in a 3:1 ratio (150 kg of peas: 50 kg of wheat), usually in combination with the Galloper wheat variety, which provides a stable support for the peas due to its higher habitus
- ► Enters the blooming phase with a dark red flower seven days earlier than Osječki zeleni

- Seeds are larger than in case of Osječki zeleni; minimal seeding rate is 150 kg of seeds per hectare
- ► Modest crop management requirements, with minimal investments in protection and fertilisation
- Excellent resistance to low temperatures
- As a pre-crop, increases soil nitrogen content and curbs weeds
- ► Allows for two harvests a year in the same field. After removal of peas, we recommend stubble sowing of early OS corn hybrids such as OS 3114
- ► Robust stem, average height 158 cm
- ► When harvested in the blooming and first pod formation phase (10-20 May), yields 50-60 t/ha of green matter, or more than 25 t/ha of haylage and more than 10 t/ha of hay

#### **OS FORAGE** CROPS



#### **BASIC PROPERTIES**

SOWING SEASON:

10 - 25 October

HARVESTING SEASON:

15-25 May (flowering and first pod formation phase)

YIELD:

50-60 t/ha of green matter (DM 16 content up to 18%)

PROTEIN CONTENT IN DM:

18%

RECOMMENDED PLANT DENSITY: 1 - 1.2 million plants per hectare

SEEDING RATE:

130-150 kg of peas + 50 kg of cereal

# OSJEČKI ZELENI

#### MOST WIDESPREAD WINTER PEAS VARIETY IN CROATIA

- ► Medium-late variety
- ► Used for voluminose fodder production
- Economically profitable and environmentally friendly production
- ► A prized ruminant feed due to its high nutritional value, in particular for dairy cows, in which it increases milk production and quality
- ► Sown together with a winter cereal, usually Galloper, a higher-habitus wheat
- ► Modest crop management requirements, with minimal investments in protection and fertilisation

- ► Rapid growth
- ► Excellent resistance to low temperatures
- Great pre-crop: increases soil nitrogen content and curbs weeds
- ➤ Vacates the field early, allowing for two harvests a year in the same field. After removal, we recommend stubble sowing of early OS corn hybrids such as OS 3114
- ▶ Robust stem, height 135 185 cm
- ▶ When harvested in the flowering and first pod formation phase (15-25 May), yields 50-60 t/ha of green matter, or more than 25 t/ha of haylage and more than 10 t/ha of hay

#### **OS FORAGE** CROPS

# **URAN**

#### SPRING PEA WITH HIGH YIELD POTENTIAL

#### **BASIC PROPERTIES**

PURPOSE:

dry grain production

LENGTH OF VEGETATION PERIOD:

AVERAGE YIELD:

from 3.5 to 4.5 t/ha

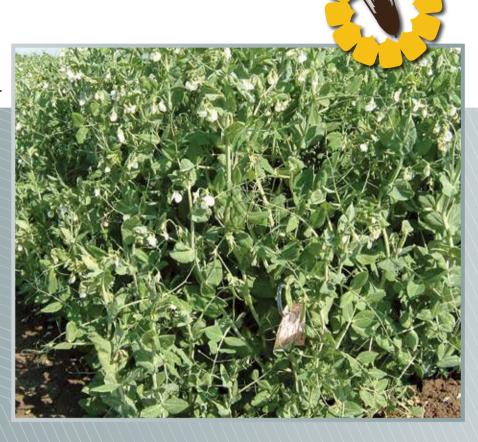
ABSOLUTE WEIGHT:

200 - 220 g

RECOMMENDED PLANT DENSITY: 1.0 - 1.3 million plants/ha

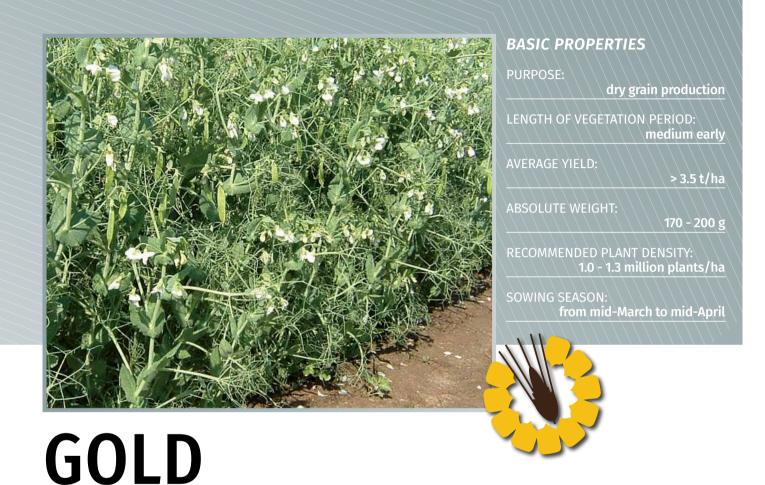
**SOWING SEASON:** 

from mid-March to mid-Apri



Uran has an increased resistance to the most common diseases and to lodging. Stalk height ranges between 60 and 80 cm. It has densely distributed nodes in the lower part of the stalk, which increases the tolerance to lodging. Uran has regular-shaped leaves and its pods are positioned in the upper third of the plant, which reduces pea loss during harvest. Peas are yellow, round, medium-sized and of good quality (protein content: 24–26%).

#### **OS FORAGE** CROPS



#### SPRING PEA OF EXCELLENT ADAPTABILITY

Gold displays very early growth and is suitable for the earliest sowing dates. The pods are positioned at the top of the plant. Average height of the plant is between 50 and 70 cm. It exhibits indeterminate growth habits and has short internodes. The specificity of its tendrils allows the plant to twine from the earliest growth stages and to form crops that are resistant to lodging. Peas are round, medium large and of high quality, with protein content ranging from 23 to 25%.



#### **SUNFLOWER** HYBRIDS







# **SURIMI CL**

#### STABILITY IN ALL PRODUCTION CONDITIONS

- ► Length of vegetation period: 110 115 days
- ► Firm stalk
- ► Exceptional pollination of the centre of the head;
- ► High standard mass per storage volume of seeds
- ► Seed yield potential: 5 5.5 t/ha
- ▶ High oil content
- ► Optimal number of plants/ha: 60.000 65.000
- ► Sowing 23 25 cm apart in rows

#### **SUNFLOWER HYBRIDS**

# DRIVER CL

EARLY MATURITY AND HIGH SEED AND OIL YIELDS





- ► Length of vegetation period: 105 110 days
- ► Firm stalk
- ► Resistance to dominant pathogens
- ► High drought tolerance
- ► Favourable head position
- ► Seed yield potential: 4.5 5 t/ha
- ► High oil content
- ► Optimal number of plants/ha: 65.000 75.000
- ► Sowing 18 20 cm apart in rows

#### **SUNFLOWER** HYBRIDS







# **GOLDY IR**

#### YIELD STABILITY AND RESISTANCE TO DISEASES

- ► Length of vegetation period: 100 110 days
- ► Short and firm stalk
- ► High resistance to dominant pathogens
- ► High drought tolerance
- ► Favourable head position
- ► Suitable for late sowing and sowing of stubble crop
- ► Seed yield potential: 4.5 5 t/ha
- ► High oil content
- ► Optimal number of plants/ha: 70.000 75.000
- ► Sowing 16 18 cm apart in rows

#### **SUNFLOWER** HYBRIDS

# **ALEXA SU**

HIGH SEED AND OIL YIELDS





- ► Length of vegetation period: 105 110 days
- ► High seed yield potential (over 5 t/ha)
- ► High oil content (52 54% of dry matter)
- ► Tolerant to drought and high temperatures
- ► Exceptional pollination of the centre of the head
- ► High standard mass per storage volume of seeds
- ► Optimal number of plants/ha: 70.000 75.000
- ► Sowing 18 20 cm apart in rows



# **KRALJICA**

### ABSOLUTE LEADER IN PRODUCTION

# BASIC PROPERTIES AVERAGE STEM HEIGHT: 75 cm WEIGHT OF 1000 KERNELS: 40 g HECTOLITER MASS: 81 kg/hl PROTEIN CONTENT: 14,2 % CONTENT OF WET GLUE: 28 % SEDIMENTATION VALUE:



- ► Medium early variety
- ▶ Osijek Agricultural Institute's leading variety in Croatia
- ► Combines yield and grain quality
- Very interesting for the milling and baking industries
- ► High grain yield potential and stability
- ► Adaptability to different production conditions
- ► Tolerance to low temperatures

- ► Tolerance to most widespread wheat diseases
- ► Stem height approx. 75 cm, firm and elastic stem, highly resistant to lodging
- Kraljica is now successfully produced in Croatia and 10 other countries in the region and beyond
- ► Seeding rate of 240 290 kg/ha in optimal sowing periods

#### **OS WHEAT VARIETIES**



## BASIC PROPERTIES AVERAGE STEM HEIGHT:

WEIGHT OF 1000 KERNELS:

**HECTOLITER MASS:** 

76 - 81 kg/hl

42 - 45 g

PROTEIN CONTENT:

11 - 13 %

85 cm

CONTENT OF WET GLUE:

22 - 25 %

SEDIMENTATION VALUE:

30 - 35 m



# **INDIRA**

#### NEW MEDIUM - EARLY, HIGH - YIELDING VARIETY

- ► Medium early variety
- ► A new winter wheat variety in Osijek Agricultural Institute's selection programme, recognised in Croatia last year
- ► Extremely high grain yield potential confirmed in preliminary trials, compared to the leading varieties in the Croatian market and some foreign markets
- ► This attractive, high-yielding variety is recommended to everyone, even the most demanding wheat farmers aiming for record grain yields

- ► Very good tolerance to low temperatures
- ► Due to its adaptability, suitable for cultivation in entire production area in Croatia
- Good tolerance to most important winter wheat diseases and pests
- Good tolerance to pre-harvest sprouting and sprouting in the ear
- ► Tall, firm and elastic stem, resistant to lodging
- In intensive production, aiming for above-average yields, application of growth regulator is also recommended
- ► Seeding rate of 225 250 kg/ha in optimal sowing periods

# **BARBA**

## NEW BEARDED WINTER WHEAT VARIETY

#### **BASIC PROPERTIES**

AVERAGE STEM HEIGHT:

75 - 78 cm

WEIGHT OF 1000 KERNELS:

45 - 50 g

**HECTOLITER MASS:** 

75 - 80 kg/h

PROTEIN CONTENT:

11 - 13 %

CONTENT OF WET GLUE:

25-30 %

SEDIMENTATION VALUE:

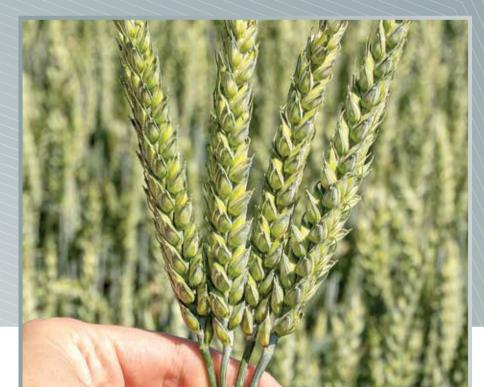
40 m



- Medium-early variety
- New bearded variety of bread-making quality winter wheat
- Medium-early variety characterized by an extremely high genetic yield potential, confirmed in a number of preliminary trials
- ► Very good tolerance to most widespread wheat diseases, making it easier to maintain good crop health

- ► Yield stability, very large grains
- ► Medium-height, firm stem offers very good resistance to lodging – a great choice for cultivation in full crop management and intensive production conditions
- ► Seeding rate of 220-250 kg/ha in the optimal sowing periods

#### **OS WHEAT VARIETIES**



BASIC PROPERTIES	
AVERAGE STEM HEIGHT:	32 cm
WEIGHT OF 1000 KERNELS:	42 g
HECTOLITER MASS:	kg/hl
PROTEIN CONTENT:	3,7 %
CONTENT OF WET GLUE:	26 %
SEDIMENTATION VALUE:	47 ml

# TIKA TAKA

#### ATTRACTIVE APPEARANCE & LARGE GRAIN

- ► Medium early variety
- ► More recent, modern winter wheat variety in Osijek Agricultural Institute's selection programme
- ► Higher habitus, large spikes, very attractive appearance and large grains
- ► High yield potential and yield stability
- ► Very stable grain quality, even in challenging years, in a wide cultivation area
- ► High productive tillering, requiring a lower seeding rate

- ► Good tolerance to low temperatures and most widespread wheat diseases
- ► Average stem height of 82 cm, firm and elastic stems, highly resistant to lodging
- ► Especially recommended for production in central and western Croatia due to its somewhat longer vegetation period
- ► Seeding rate of 200-240 kg/ha in optimal sowing periods

# **BRKO**

### VERY EARLY, HIGHLY ADAPTABLE VARIETY

# BASIC PROPERTIES AVERAGE STEM HEIGHT: 68 cm WEIGHT OF 1000 KERNELS: 42 g HECTOLITER MASS: 81 kg/hl PROTEIN CONTENT: 13,6 % CONTENT OF WET GLUE: 27 % SEDIMENTATION VALUE: 62 ml



- ▶ Early variety
- ► New, very early and very intensive bearded wheat variety
- Its early maturity is an important agronomic property, especially important in "short vegetation period" production years
- ► In case of extended wheat vegetation, high grains per spike count offers added potential to achieve aboveaverage grain yield, in addition to very high grain quality

- ► Firm stem ensures very good tolerance to lodging
- Very good tolerance to low temperature and most widespread wheat diseases
- ► As per preliminary production performance, we recommend the variety for cultivation in the entire production area in Croatia
- ► Safe from wildlife attacks and suitable for cultivation on surfaces near forest areas
- ► Seeding rate of 220 260 kg/ha in optimal sowing periods

#### **OS WHEAT VARIETIES**



# BASIC PROPERTIES AVERAGE STEM HEIGHT: 78 cm WEIGHT OF 1000 KERNELS: 42 g HECTOLITER MASS: 81 kg/hl PROTEIN CONTENT: 13,2 % CONTENT OF WET GLUE: 26 % SEDIMENTATION VALUE: 43 ml

# **VULKAN**

#### BEARDED VARIETY EXTREMELY TOLERANT TO DISEASES

- Bearded variety
- ► Medium-early
- ► High grain yield potential and stability
- ► Categorised as an improver in some markets
- ► Tolerance to low temperatures
- ► Extremely adaptable to different climate and soil conditions
- ▶ Suitable for cultivation in areas at risk of wildlife attack

- ➤ Very high resistance to main wheat diseases, making it easier to maintain crop health; also fits well in more extensive production conditions
- ► Medium-height, firm and elastic stem, resistant to lodging
- ► In intensive production, we recommend using a growth regulator
- ► Lower seeding rate of 200-220 kg/ha due to high productive tillering

**GARAVUŠA** 

NEW HIGH - QUALITY, HIGH YIELD POTENTIAL VARIETY

#### **BASIC PROPERTIES**

**AVERAGE STEM HEIGHT:** 

70 cm

WEIGHT OF 1000 KERNELS:

41 g

**HECTOLITER MASS:** 

81 kg/hl

PROTEIN CONTENT:

13,7 %

CONTENT OF WET GLUE:

29 %

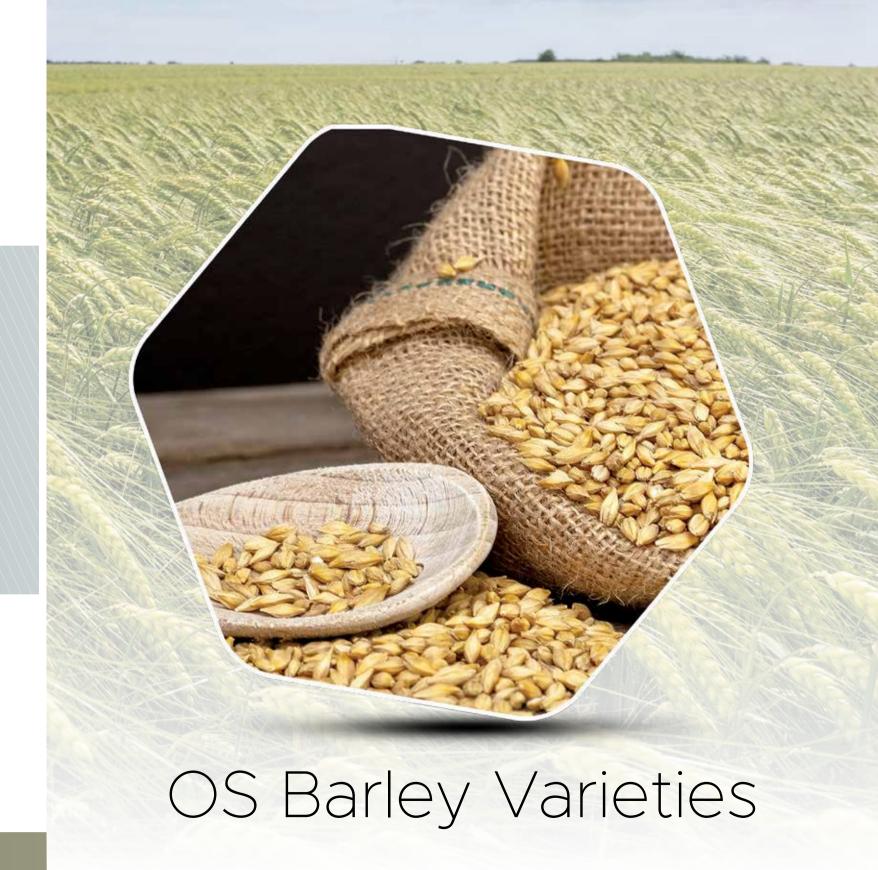
SEDIMENTATION VALUE:

50 m



- Medium early variety
- ► New awnless variety in Osijek Agricultural Institute's selection programme
- ► Largely combines the most important production characteristics: grain yield and quality
- ► An adaptable variety, suitable for cultivation in a wide production area in Croatia
- ► It will manifest its grain yield potential and stability even in the most challenging years

- ► Very good tolerance to low temperatures and most widespread wheat diseases
- Highly resistant to pre-harvest sprouting, minimizing crop losses
- ► Short, firm and elastic stem, very good resistance to lodging
- ► Attractive and large spikes, high-quality grains especially important for the milling and baking industry
- ► Seeding rate of 220 260 kg/ha in optimal sowing periods



# **BARUN**

THE LEADING WINTER BARLEY VARIETY IN CROATIA

#### **BASIC PROPERTIES**

**JSES** 

malting industry, livestock industry, human consumption

AVERAGE STEM HEIGHT

80 cm

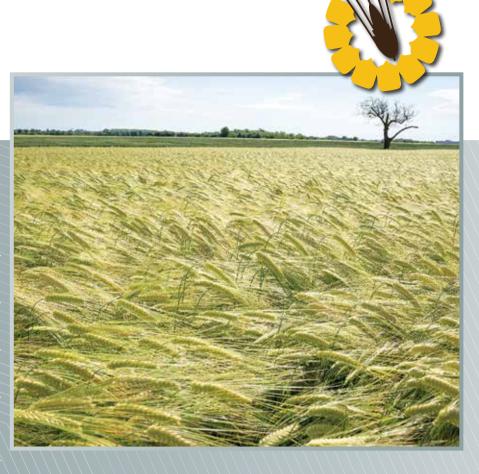
1000 - KERNEL WEIGHT

46 - 48 g

STANDARD MASS PER STORAGE VOLUME 67 - 72 kg/hl

SEEDING RATE

450 germinable seeds/m<sup>2</sup> (220 - 250 kg/ha)



- ► Medium-early variety
- ► One of the top two-rowed winter barley varieties in Osijek Agricultural Institute's selection programme
- ► Leading variety in barley production in Croatia for a number of years, equally important for the malting and livestock industries
- ► Tolerant to the most widespread diseases
- ► Short, firm and elastic stem, resistant to lodging

- ► Large, uniformly sized grains
- ► Amount and stability of grain yield confirmed in many more or less challenging years and in a wide cultivation area
- Successfully grown in Romania, Hungary and Bosnia and Herzegovina, one of the leading varieties in barley production in North Macedonia
- ► Recommended seeding rate of 220 250 kg/ha in optimal sowing periods

#### **OS BARLEY** VARIETIES



#### TWO-ROWED BARLEY VARIETY OFFERING "MAXIMAL" YIELD

- ► Medium-late variety
- ► Most widely grown two-rowed winter barley variety in Osijek Agricultural Institute's selection programme
- ► Recognised and successfully produced in Croatia and 10 other countries in the region and beyond
- ► Great adaptability and grain yield stability
- ► Highly tolerant to adverse effects of climate change (high temperature oscillations and drought)
- ► Good wintering, high productive tillering

- ► Short, firm stem, resistant to lodging
- ► High tolerance to diseases
- ► Often chosen by farmers who use intensive crop management to achieve above-average grain yield
- ► Due to its somewhat longer vegetation period, it manifests its yield potential both in the central and in the western production areas in Croatia
- ► Recommended seeding rate of 210-220 kg/ha in optimal sowing periods

# **KRALJ**

HIGHLY ADAPTABLE, TWO-ROWED WINTER BARLEY VARIETY

#### **BASIC PROPERTIES**

USES

livestock industry, human consumption

AVERAGE STEM HEIGHT

88 cm

1000 - KERNEL WEIGHT

48 - 50 g

STANDARD MASS PER STORAGE VOLUME 67 - 70 kg/hl

SEEDING RATE

375 - **425** germinable seeds/m² (200 - 220 kg/ha)



- ► Medium-early variety
- ► New, high-yielding two-rowed winter barley variety for the livestock industry and human consumption
- ► An extremely adaptable variety suitable for cultivation in fertile soils and more intensive production conditions, but also grows well in less fertile soils and in more extensive production conditions
- ► High yield potential
- ► Tolerance to most widespread diseases
- ► Medium-height, firm and elastic stem, resistant to lodging
- ► Large, uniformly sized grains
- ➤ Seeding rate of 200-220 kg/ha in optimal sowing periods to achieve target plant density

#### **OS BARLEY VARIETIES**



# **KUM**

#### LATEST HIGH-YIELDING QUALITY TWO-ROWED WINTER BARLEY VARIETY

- ► Medium-late variety
- ► Latest two-rowed winter barley variety for the livestock industry and human consumption
- ► Medium-length vegetation period and heading time suitable for barley production conditions in Croatia, especially the lowland area, where it achieves stable and high yields, and high grain quality
- ► High adaptability
- ► Very good resistance to low temperatures and drought
- ► Tolerance to most widespread diseases

- ► Large, uniformly sized grains
- ➤ Shorter, firm and elastic stems, with short internodes; its characteristics make it one of our varieties most resistant to lodging
- ► Not recommended as a malting variety, but if malting barley crop management is correctly applied, produces malt with a high extract content and very good starch degradation cytolysis and proteolysis indicators
- Seeding rate of 200-220 kg/ha in optimal sowing periods

# **PLETER**

NEW EARLY VARIETY WITH A HIGH YIELD POTENTIAL

#### BASIC PROPERTIES

USES

livestock industry, human consumption

AVERAGE STEM HEIGHT

82 cm

1000 - KERNEL WEIGHT

46 - 50 8

STANDARD MASS PER STORAGE VOLUME 70 kg/h

SEEDING RATE

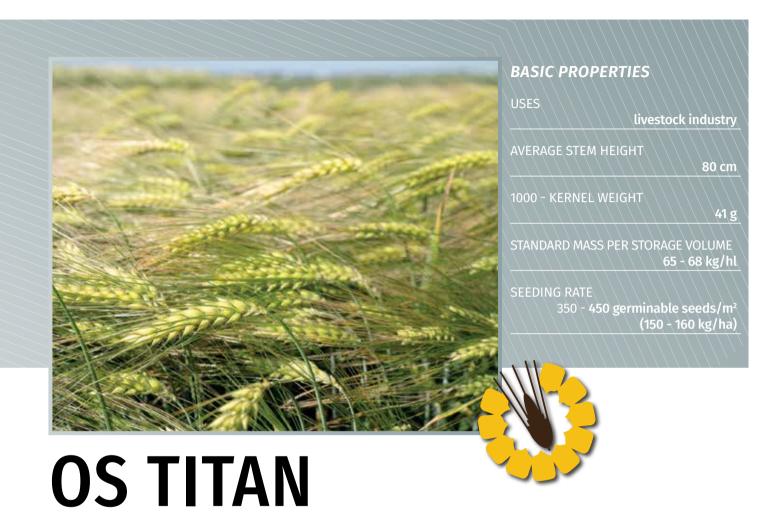
375 - **425** germinable seeds/m (200 - 220 kg/ha



- ▶ Early variety
- ▶ New, earlier two-rowed winter barley variety
- ► Capable of high grain yield potential even in drought years thanks to earlier heading and extended grainfilling time
- ► Well-formed, large grains, high grain-filling intensity, higher standard mass per storage volume, and high first-class grain content
- Very short and very firm stems minimize the risk of lodging

- Very high grain yields can be expected in more fertile soils, using intensive crop management and wellbalanced mineral fertilisation
- ► Due to early maturity and earlier technological maturity, production of catch crops 00 group soybean varieties with a short vegetation period (Korana) or early FAO 300 group hybrids (OS 3114) can be planned after Pleter, if weather is adequate
- ► Recommended seeding rate of 200-220 kg/ha in optimal sowing period

#### **OS BARLEY** VARIETIES



#### SIX-ROWED BARLEY VARIETY WITH A SHORT VEGETATION PERIOD

- ▶ Early variety
- ► Most widely grown six-rowed winter barley variety in Croatia
- ► Its very early maturity is a very valuable property in increasingly frequent "short vegetation period", high-stress production years
- ► Shorter, extremely firm stem, not prone to lodging, offering special safety in production
- ► High tolerance to most widespread barley diseases, good tolerance to extreme weather in winter and to

- drought
- Confirmed high grain yield stability; has achieved record yields in some years in a wide cultivation area in Croatia
- ► Stable and high grain yields in different soil types, suitable for cultivation in fertile soils and more intensive production conditions
- ► Very low per hectare seed consumption: lower seeding rate of 150-160 kg/ha in optimal sowing period

# **PANONAC**

NOTABLE ADVANCE-MENT IN SIX-ROWED BARLEY SELECTION

#### BASIC PROPERTIES

USES

livestock industry, human consumption

AVERAGE STEM HEIGHT

92 cm

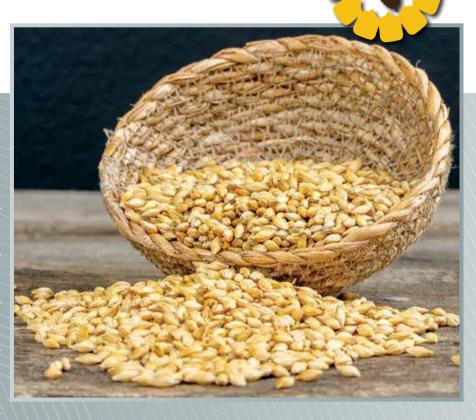
1000 - KERNEL WEIGHT

42 - 46 9

STANDARD MASS PER STORAGE VOLUME 65 - 68 kg/h

SEEDING RATE

350 germinable seeds/m<sup>2</sup> (190 - 210 kg/ha)



- ► Medium-late variety
- New, modern and highly attractive six-rowed winter barley variety for the livestock industry and human consumption
- ► Notable advancement in: increased grain yield, further "health record" improvement, increased resistance to lodging, increased first-class grain content and grain protein content
- ► Very attractive phenotype, horizontal spikes
- ► Taller, but very firm and elastic stem
- ► Large and well-formed grains
- ► Given its longer vegetation period, it will manifest its yield potential both in the central and western production areas in Croatia
- ► Recommended seeding rate of 190 210 kg/ha in optimal sowing periods

#### **OS BARLEY** VARIETIES



#### TWO-ROW SPRING BARLEY WITH GOOD COMMERCIAL PROPERTIES

- ► Matej is a high-yielding spring variety of fodder barley from the Osijek Agricultural Institute's selection programme
- ▶ It is a variety of medium maturity, featuring a tworowed, loose spike, which has been produced for many years, confirming time and again the amount and stability of its grain yield in years of different weather and soil conditions
- ▶ Its commercial properties include tolerance to most
- widespread diseases and pests, a medium-height, firm, elastic and lodging-resistant stem, and large, uniformly sized grains, with an extremely high standard mass per storage volume
- ► Our recommendation is to sow it in February and early March, with the recommended seeding rate of 210 240 kg/ha
- ► Optimal sowing season February and early March

# **DADO**

#### TWO-ROWED SPRING BARLEY VARIETY FOR THE MALT INDUSTRY

#### **BASIC PROPERTIES**

USES

livestock industry, human consumption, malt industry

AVERAGE STEM HEIGHT

75 cm

1000 - KERNEL WEIGHT

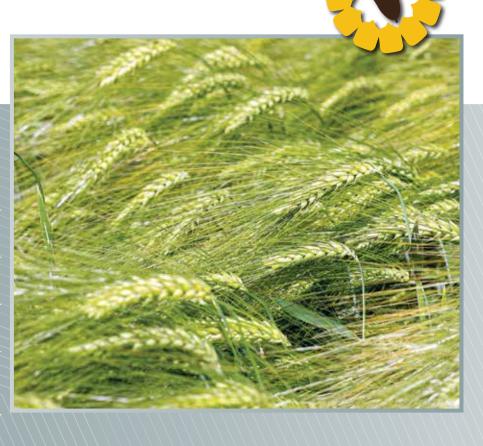
51 g

STANDARD MASS PER STORAGE VOLUME

68 kg/hl

SEEDING RATE

germinable seeds/m² (210–240 kg/ha)



- ► Dado is a well-known high-yielding spring barley variety from the Osijek Agricultural Institute's selection programme
- ► It is equally well-suited to cattle farming, human consumption, and the malt industry
- As a variety characterised by early maturity, Dado's vegetation period is well-suited to the production conditions in Croatia and Southeast Europe
- ▶ Its commercial properties include tolerance to most widespread diseases and pests, good drought tolerance, a medium-height, firm, elastic and lodging-resistant stem, and large, uniformly sized grains, with an extremely high standard mass per storage volume
- ➤ Our recommendation is to sow it as early as possible in the spring, with the recommended seeding rate of 210 240 kg/ha
- ► Optimal sowing season: earlier in the spring

#### **OS BARLEY VARIETIES**



# **PRKOS**

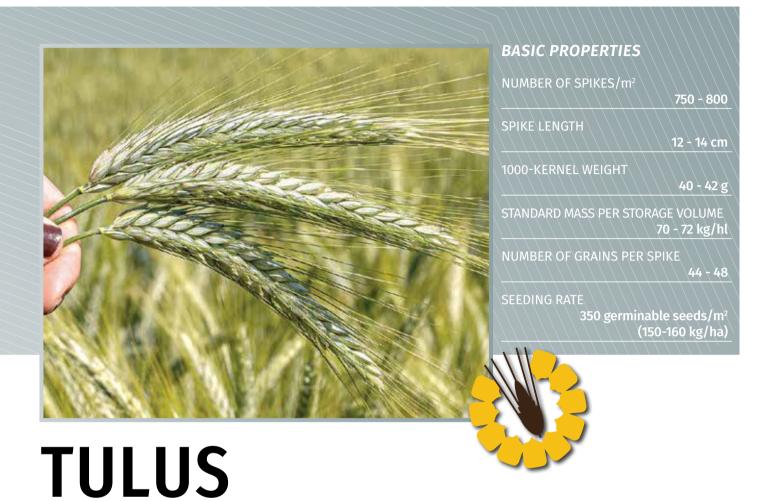
#### VARIETY OF VERY GOOD TO EXCELLENT MALTING QUALITY

- ► Medium early variety of two-row spring barley intended for brewing, livestock industry and human consumption
- ► Suitable for sowing in late autumn
- ► Variety with high yield potential and first grade grain content
- ► Medium-height, firm and elastic stalk very resistant to lodging

- ► Very good resistance to drought and the most common diseases
- ► If malting barley crop management is correctly applied, it produces malt with a high extract content and very good to excellent starch degradation cytolysis and proteolysis indicators
- ► Optimal sowing season February and early March, possibly in late autumn (November)

# Triticale Varieties

#### **TRITICALE VARIETIES**



#### HIGH-YIELDING TRITICALE VARIETY, GROWN ACROSS EUROPE

- ► Early variety
- ► High-yielding early triticale variety
- ► Morphological aspect closer to rye
- ▶ Well-developed root system
- ► Uses: livestock feed, whole-plant silage, ethanol and starch production
- ► Average stem height 90 100 cm, very high resistance to lodging

- ► Good adaptability to different soil and climate conditions, making it suitable for cultivation in all soil types
- ► Very high resistance to most widespread diseases, low temperatures and drought
- ► Seeding rate of 150 160 kg/ha in optimal sowing periods



#### **OILRAPE SEED HYBRIDS&VARIETIES**



#### **OILSEED RAPE VARIETY**

- ► Medium-late variety
- ► Very high yield potential
- Very good initial growth
- ► Remarkable adaptability
- ▶ Very good branching ability in lower densities
- ▶ High oil yield

- ► Average oil content 45.2%
- ► Very good lodging resistance
- ► Medium-height plants (139 cm)
- ► Very good resistance to premature pod shatter
- ► Very good resistance to diseases
- ► Very good resistance to low temperatures

#### **OILRAPE SEED HYBRIDS&VARIETIES**

**DYNAMIC** 

OILSEED RAPE HYBRID

#### **BASIC PROPERTIES**

OPTIMAL SOWING PERIOD:

End of August beginning of September

RECOMMENDED SEEDING RATE: 450.000 - 500.000 plants/ha



- ► Triple resistance: TuYV + Phoma + Verticillium
- ► Medium-late hybrid
- ► TuYV (Turnip Yellow Virus) resistant hybrid
- ► RLM7 gene: resistance to Phoma and other major diseases
- ► Very high yield potential
- ► High oil content

- ► Suitable for all production conditions and all types of soils
- ► Quick and intensive growth in autumn
- ► Good resistance to low temperatures
- ► Good resistance to harvest pod shatter
- ► Excellent tolerance to diseases
- ➤ Virus resistance makes it suitable for sowing in earlier periods (no danger of virus infection)



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