

# autumn catalogue

# Our company

Apsov is longstanding established Italian company which constantly endeavours to enhance the field of agriculture.

Our commitment is to create new opportunities for ourselves and our customers. We constantly strive to strengthen and enhance the brand, by breeding new varieties and offering excellent services.

We are genetic providers and carriers of innovation; we believe in a flexible and efficient organization, market oriented and strongly focused on a technical approach.

Our ambition is to be a leading company with the best human and genetics resources.

The values which drive us are customer focus, passion for work, dynamism, fairness, cooperation, positivity.



Apsov came into being a Cooperative -APSOV Soc. Coop- in 1967, when it was set up by a group of young farmers. The favourable climatic conditions of the territory, coupled with the founders' agricultural expertise remain the basis for high quality seed production. Over the recent years Apsov business grew also through acquisition of shares of other companies: GMAX SEEDS settled in 2017; in 2023, the first foreign subsidiary, APSOV Seme Doo, was established in Serbia; over the same year APSOV entered the capital of the Spanish company HIBRISOL and purchased 100% of Sementi Maremma srl. Currently the multiplication area is 8,500 ha for winter crops and 3,500 ha for spring crops, with a production exceeding 35,000 tons per year. The group's turnover in 2022 was close to 50 million euro, exclusively generated by the seed business.



# Our strengths

## Research

Our goal is to develop high-yielding, consistent varieties and hybrids able to match the diverse market needs.

A wide network of trial locations and partnerships allows for precise agronomic and quality validation.

We currently have 9 active breeding programs:

Bread wheat, Durum wheat, Triticale, Barley, Oat, Chickpea, Faba bean, Sunflower, Alfalfa.



## Sustainability

At our facilities in Voghera and Grosseto, we generate electricity through photovoltaic systems capable of producing 1,100,000 kWh per year—covering approximately 70% of our energy needs. In doing so, we reduce CO<sub>2</sub> emissions into the atmosphere around 600 tons, annually.



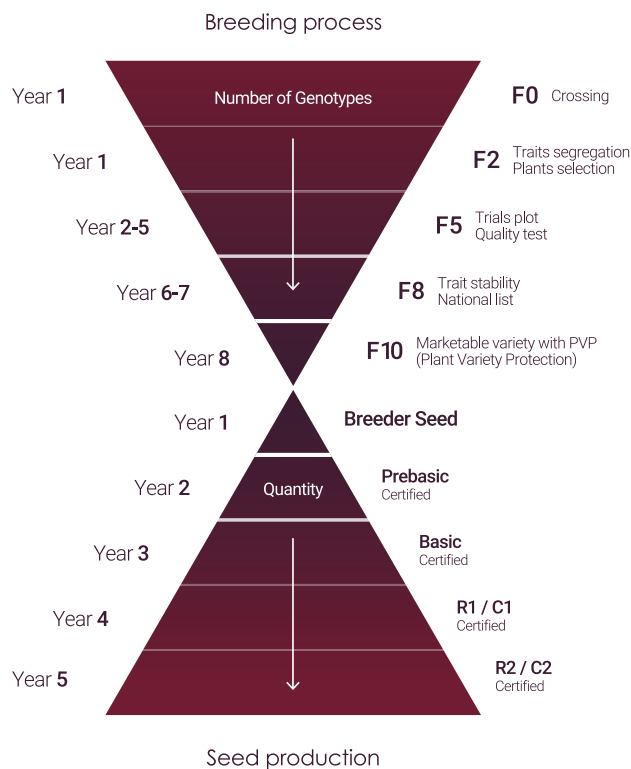
## People

We stand by our employees and strive to ensure a motivating and safe working environment.

We are committed to having a positive impact on local communities by supporting projects that promote the development of education, culture, economic activities, and social initiatives.



# Breeding



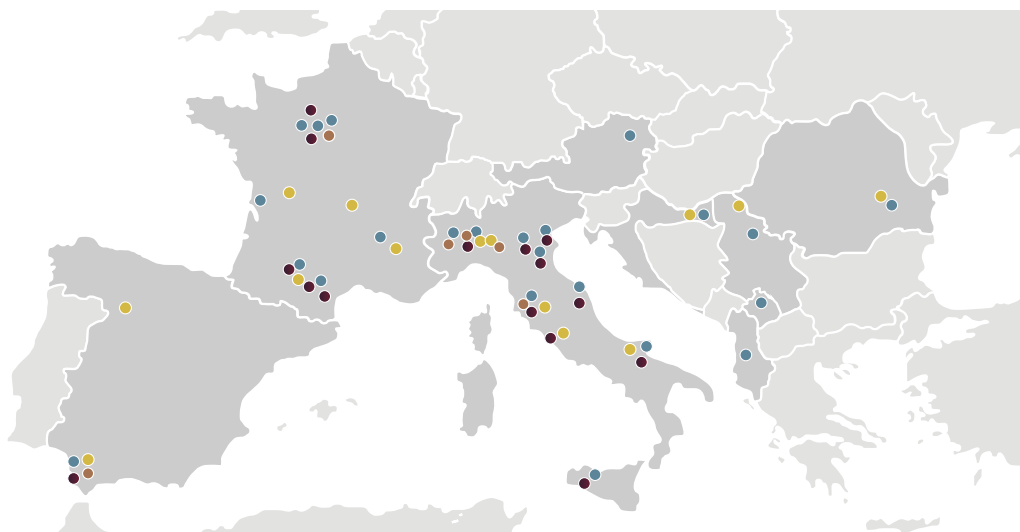
Innovation has always been APSOV strength, thanks to constant investments in research and development, acquired skills and international collaborations. APSOV carries out breeding programs for bread and durum wheat, barley, triticale, employing 12 people on a full-time basis. Creating new varieties with high and consistent yield, suitable to match the needs of farmers, industry, and consumers is the target of our Breeding Programs.

To achieve these goals, germplasm is imported from all over the world, it is subsequently assessed and used to create segregating populations among which to select the best genotypes, through the combination of different techniques: winter nursery, single seed descent (SSD), shuttle breeding, double haploids and molecular markers.

The large trials network and the cooperation with several partners support the breeding activity and enable a timely assessment of the agronomic and quality value of the products.

## The network of breeding trials in Europe

● Wheat ● Durum ● Barley ● Triticale





A close-up photograph of numerous wheat grains, showing their golden-brown color and textured surface. The grains are piled together, with some in sharp focus in the foreground and others blurred in the background. The word "WHEAT" is overlaid in white, bold, sans-serif capital letters in the center of the image.

**WHEAT**

# Growth habitus and planting time

## GROWTH HABITUS


WINTER		MID-WINTER	MID-ALTERN.	ALTERNATIVE	SPRING
AGEN	ALAMPUR	ALEPPO	ACUNA	ALAGIR	ALBACETE
AMISTAD	ATENE	ALGERI		ALAMINOS	ALEGRIAS
AMPARA	AUSTIN	ANVERSA		APULIA	ARABIA
ANZIO	ARDES	ARTEK		ATAFU	
ATLANTA				BISANZIO	
AXUM					
REBELDE					
EARLY		MEDIUM		LATE	

## Quality and hardness

TOP QUALITY BREAD WHEAT			BISANZIO ALAMPUR REBELDE ARDES AMISTAD APULIA AGEN AXUM	ALGERI	ARTEK
HIGH QUALITY BREAD WHEAT			ALAMINOS ALEGRIAS* ALEPPO* ALBACETE*		
BREAD WHEAT		ACUNA ANZIO ALAGIR ANVERSA ARABIA* ATAFU	ATENE AUSTIN	ATLANTA	
BISCUITS WHEAT	AMPARA				
	SOFT	MEDIUM	HARD		

\* white kernel

# Varietal profile

	FEATURES								RESISTANCES						QUALITIES			
	QUALIDOSE	QUALITY	HEIGHT	EAR	GRAIN COLOUR	GROWTH HABITUS	EARLINESS	LODGING	COLD	MILDEW	LEAF RUST	YELLOW RUST	SEPTORIA	FUSARIUM	HECTOL. WEIGHT (kg/hl)	TKW (g)	PROTEIN CONTENT	CLORTOLURON
ACUNA		BR	M	AW	R	MA	E	MR	R	MR	R	R	MR	R	good 79-81	good 40-42	M	T
AGEN		TQ	M	AW	R	W	M	R	R	MR	MR	R	MR	MR	good 79-81	medium 37-39	GO	S
ALAGIR		BR	T	AL	R	A	E	R	R	MR	MR	MR	R	MR	high 81-83	medium 37-39	M	S
ALAMINOS		HQ	T	AW	R	A	ME	R	R	R	MR	MR	R	R	high 81-83	medium 37-39	GO	T
ALAMPUR		TQ	M	AW	DR	W	M	R	R	MR	MS	R	MR	MR	high 81-83	low 34-36	H	T
ALBACETE		HQ	M	AW	WH	S	E	R	MR	R	R	R	R	MR	good 79-81	medium 37-39	H	T
ALEGRIAS		HQ	MT	AW	WH	S	E	MR	MR	R	R	R	MS	MR	good 79-81	medium 37-39	H	T
ALEPPO		HQ	M	AW	WH	MW	M	MR	R	MR	MR	MR	MR	MR	high 81-83	low 34-36	H	T
ALGERI		H/T Q	M	AW	R	MW	M	R	R	R	R	MR	R	R	high 81-83	good 40-42	GO	T
AMISTAD		TQ	M	AW	DR	W	M	R	R	R	R	R	MR	R	high 81-83	low 34-36	H	T
AMPARA		BI	MT	AL	R	W	M	R	R	R	MR	R	MR	MR	medium 77-79	high 43-45	L	T
ANVERSA		BR	M	AL	R	MW	M	MR	R	R	MR	R	MR	MS	medium 77-79	medium 37-40	M	T
ANZIO		BR	M	AW	R	W	M	R	R	MR	R	R	MR	R	good 79-81	high 43-45	M	S
APULIA		TQ	M	AW	R	A	E	MR	R	R	MS	R	R	MR	good 79-81	low 34-36	H	T
ARABIA		BR	MT	AW	WH	S	E	MR	R	MR	MS	MS	MS	MR	high 81-83	good 40-42	GO	S
ARDES		TQ	M	AW	R	W	M	R	R	R	R	R	MR	R	good 79-81	low 34-36	H	S
ARTEK		H/T Q	M	AW	R	W	M	R	R	R	R	R	R	R	high 81-83	good 40-42	GO	T
ATAFU		HQ	MT	AW	R	A	E	R	R	R	R	MR	MR	R	high 81-83	medium 37-40	GO	T
ATENE		BR	M	AW	R	W	L	R	R	R	R	R	R	MR	good 79-81	high 43-45	M	S
ATLANTA		BR	M	AW	R	W	ML	R	R	R	R	R	R	MR	good 79-81	good 40-42	M	T
AUSTIN		BR	M	AW	R	W	ML	R	R	R	MR	R	MR	R	good 79-81	high 43-45	M	S
AXUM		TQ	MT	AW	DR	W	M	MS	R	R	MR	MR	MR	MR	high 81-83	medium 37-39	GO	T
BISANZIO		TQ	M	AW	A	A	ME	R	R	R	MS	MS	MR	MR	good 79-81	high 43-45	H	T
REBELDE		TQ	M	AW	DR	W	M	R	R	R	MS	R	R	R	high 81-83	low 34-36	VH	T

**QUALITY:** TQ= Top quality bread wheat; HQ= High quality bread wheat; BR= Bread wheat; BI= Biscuits wheat - **HEIGHT:** S=short; M=medium; MH= medium-high; H= high - **EAR:** AL=awnless; AW=awned - **GRAIN COLOUR:** R=red; DR=dark red; WH=white - **GROWTH HABITUS:** A=alternative; W=winter; MA=midalternative; MW=mid-winter; S=spring - **EARLINESS:** E= early; L=late ML=medium-late; ME=medium-early; M=medium - **RESISTANCES:** R=resistant; MR=mid-resistant; MS=mid-sensitive; S=sensitive - **PROTEIN CONTENT:** L=low; M=medium; GO=good; H=high; VH=very high - **CLORTOLURON:** T.=tolerant; S=sensitive



# Ardes

Rebelde x Nogal [2023]

## Top quality bread wheat



### FEATURES

HEIGHT	medium
EAR	awned
GRAIN COLOUR	red
GROWTH HABITUS	winter
EARLINESS	medium

### QUALITIES

HECTOLITRIC WEIGHT	good 79-81 kg/hl
TKW	low 34-36 g
ALVEOGRAPH	W:320-410 - P/L:0,7-0,9
HARDNESS	hard
PROTEIN CONTENT	high

### RESISTANCES

LODGING				R
COLD				R
MILDEW				R
LEAF RUST				R
YELLOW RUST				R
SEPTORIA			MR	
FUSARIUM				R

### ADVICES

Sensitive to Clortoluron



# Rebelde

(Bologna x CH710) x Bologna - [2012]

## Top quality bread wheat



### FEATURES

HEIGHT	medium
EAR	awned
GRAIN COLOUR	dark red
GROWTH HABITUS	winter
EARLINESS	medium

### QUALITIES

HECTOLITRIC WEIGHT	high 81-83 kg/hl
TKW	low 34-36 g
ALVEOGRAPH	W:360-460 - P/L:0,6-0,9
HARDNESS	hard
PROTEIN CONTENT	very high

### RESISTANCES

LODGING				R
COLD				R
MILDEW				R
LEAF RUST		MS		
YELLOW RUST				R
SEPTORIA				R
FUSARIUM				R

### ADVICES

Tollerant to Clortoluron





# Amistad

Genealogy not available - [2023]

**Top quality bread wheat**



## FEATURES

HEIGHT	medium
EAR	awned
GRAIN COLOUR	dark red
GROWTH HABITUS	winter
EARLINESS	medium

## QUALITIES

HECTOLITRIC WEIGHT	high 81-83 kg/hl
TKW	low 34-36 g
ALVEOGRAPH	W:360-460 - P/L:0,6-0,8
HARDNESS	hard
PROTEIN CONTENT	high

## RESISTANCES

LODGING				R
COLD				R
MILDEW				R
LEAF RUST				R
YELLOW RUST				R
SEPTORIA			MR	
FUSARIUM				R

## ADVICES

Tolerant to Clortoluron



# Alampur

Rebelde x 7.04 7 - [2021]

**Top quality bread wheat**



## FEATURES

HEIGHT	medium
EAR	awned
GRAIN COLOUR	dark red
GROWTH HABITUS	winter
EARLINESS	medium

## QUALITIES

HECTOLITRIC WEIGHT	high 81-83 kg/hl
TKW	low 34-36 g
ALVEOGRAPH	W:380-480 - P/L:0,6-0,9
HARDNESS	hard
PROTEIN CONTENT	high

## RESISTANCES

LODGING				R
COLD				R
MILDEW			MR	
LEAF RUST		MS		
YELLOW RUST				R
SEPTORIA			MR	
FUSARIUM			MR	

## ADVICES

Tolerant to Clortoluron



# Axum

Bokaro x Bologna - [2019]

## Top quality bread wheat



### FEATURES

HEIGHT	medium-tall
EAR	awned
GRAIN COLOUR	dark red
GROWTH HABITUS	winter
EARLINESS	medium

### QUALITIES

HECTOLITRIC WEIGHT	high 81-83 kg/hl
TKW	medium 37-39 g
ALVEOGRAPH	W:300-360 - P/L:0,5-0,6
HARDNESS	hard
PROTEIN CONTENT	good

### RESISTANCES

LODGING		MS	
COLD			R
MILDEW			R
LEAF RUST		MR	
YELLOW RUST		MR	
SEPTORIA		MR	
FUSARIUM		MR	

### ADVICES

Tolerant to Clortoluron



# Agen

Rebelde x Nogal - [FR 2025]

## Top quality bread wheat



### FEATURES

HEIGHT	medium
EAR	awned
GRAIN COLOUR	red
GROWTH HABITUS	winter
EARLINESS	medium

### QUALITIES

HECTOLITRIC WEIGHT	good 79-81 kg/hl
TKW	medium 37-39 g
ALVEOGRAPH	W:260-320 - P/L:0,4-0,6
HARDNESS	hard
PROTEIN CONTENT	good

### RESISTANCES

LODGING				R
COLD				R
MILDEW		MR		
LEAF RUST		MR		
YELLOW RUST				R
SEPTORIA		MR		
FUSARIUM		MR		

### ADVICES

Sensitive to Clortoluron

# Algeri

Adelante x Bramante - [2020]

## High/Top quality bread wheat



### FEATURES

HEIGHT	medium
EAR	awned
GRAIN COLOUR	red
GROWTH HABITUS	mid-winter
EARLINESS	medium

### QUALITIES

HECTOLITRIC WEIGHT	high 81-83 kg/hl
TKW	good 40-42 g
ALVEOGRAPH	W:280-340 - P/L:0,5-0,7
HARDNESS	hard
PROTEIN CONTENT	good

### RESISTANCES

LODGING				R
COLD				R
MILDEW				R
LEAF RUST				R
YELLOW RUST			MR	
SEPTORIA				R
FUSARIUM				R

### ADVICES

Tolerant to Clortoluron

# Artek

Adelante x Bramante - [2020]

## High/Top quality bread wheat



### FEATURES

HEIGHT	medium
EAR	awned
GRAIN COLOUR	red
GROWTH HABITUS	mid-winter
EARLINESS	medium

### QUALITIES

HECTOLITRIC WEIGHT	high 81-83 kg/hl
TKW	good 40-42 g
ALVEOGRAPH	W:260-320 - P/L:0,4-0,6
HARDNESS	hard
PROTEIN CONTENT	good

### RESISTANCES

LODGING				R
COLD				R
MILDEW				R
LEAF RUST				R
YELLOW RUST				R
SEPTORIA				R
FUSARIUM				R

### ADVICES

Tolerant to Clortoluron



# Anzio

Basmati x Cipres - [2024]

## Bread wheat



### FEATURES

HEIGHT	medium
EAR	awned
GRAIN COLOUR	red
GROWTH HABITUS	winter
EARLINESS	medium

### QUALITIES

HECTOLITRIC WEIGHT	good 79-81 kg/hl
TKW	high 43-45 g
ALVEOGRAPH	W:190-270 - P/L:0,6-0,8
HARDNESS	medium-hard
PROTEIN CONTENT	medium

### RESISTANCES

LODGING				R
COLD				R
MILDEW			MR	
LEAF RUST				R
YELLOW RUST				R
SEPTORIA			MR	
FUSARIUM				R

### ADVICES

Sensitive to Clortoluron



# Atlanta

(Sirtaky x PR22R58) x Solehio - [2022]

## Bread wheat



### FEATURES

HEIGHT	medium
EAR	awned
GRAIN COLOUR	red
GROWTH HABITUS	winter
EARLINESS	medium-late

### QUALITIES

HECTOLITRIC WEIGHT	good 79-81 kg/hl
TKW	good 40-42 g
ALVEOGRAPH	W:160-220 - P/L:0,6-0,8
HARDNESS	hard
PROTEIN CONTENT	medium

### RESISTANCES

LODGING				R
COLD				R
MILDEW				R
LEAF RUST				R
YELLOW RUST				R
SEPTORIA				R
FUSARIUM			MR	

### ADVICES

Tolerant to Clortoluron





# Ampara

Artico x Bagou - [2022]

## Biscuits wheat



FEATURES	HEIGHT	medium-tall
	EAR	awnless
	GRAIN COLOUR	red
	GROWTH HABITUS	winter
	EARLINESS	medium

QUALITIES	HECTOLITRIC WEIGHT	medium 77-79 kg/hl
	TKW	high 43-45 g
	ALVEOGRAPH	W:100-120 - P/L:0,2-0,3
	HARDNESS	soft
	PROTEIN CONTENT	low

RESISTANCES	LODGING				R
	COLD				R
	MILDEW				R
	LEAF RUST			MR	
	YELLOW RUST				R
	SEPTORIA			MR	
	FUSARIUM			MR	

ADVICES Tolerant to Clortoluron



# Anversa

(Sirtaki x PR22R58) x W2 - [2020]

## Bread wheat



FEATURES	HEIGHT	medium
	EAR	awnless
	GRAIN COLOUR	red
	GROWTH HABITUS	mid-winter
	EARLINESS	medium

QUALITIES	HECTOLITRIC WEIGHT	medium 77-79 kg/hl
	TKW	medium 37-39 g
	ALVEOGRAPH	W:160-220 - P/L:0,5-0,7
	HARDNESS	medium-hard
	PROTEIN CONTENT	medium

RESISTANCES	LODGING			MR	
	COLD				R
	MILDEW				R
	LEAF RUST			MR	
	YELLOW RUST				R
	SEPTORIA			MR	
	FUSARIUM		MS		

ADVICES Tolerant to Clortoluron



# Atene

Akamar X PR22R58 [2023]

## Bread wheat



### FEATURES

HEIGHT	medium
EAR	awned
GRAIN COLOUR	red
GROWTH HABITUS	winter
EARLINESS	late

### QUALITIES

HECTOLITRIC WEIGHT	good 79-81 kg/hl
TKW	high 43-45 g
ALVEOGRAPH	W:190-270 - P/L:0,4-0,7
HARDNESS	medium-hard
PROTEIN CONTENT	medium

### RESISTANCES

LODGING				R
COLD				R
MILDEW				R
LEAF RUST				R
YELLOW RUST				R
SEPTORIA				R
FUSARIUM			MR	

### ADVICES

Sensitive to Clortoluron



# Austin

Diamanto x Altamira [2023]

## Bread wheat



### FEATURES

HEIGHT	medium
EAR	awned
GRAIN COLOUR	red
GROWTH HABITUS	winter
EARLINESS	medium-late

### QUALITIES

HECTOLITRIC WEIGHT	good 79-81 kg/hl
TKW	high 43-45 g
ALVEOGRAPH	W:140-200 - P/L:0,4-0,7
HARDNESS	medium-hard
PROTEIN CONTENT	medium

### RESISTANCES

LODGING				R
COLD				R
MILDEW				R
LEAF RUST			MR	
YELLOW RUST				R
SEPTORIA			MR	
FUSARIUM				R

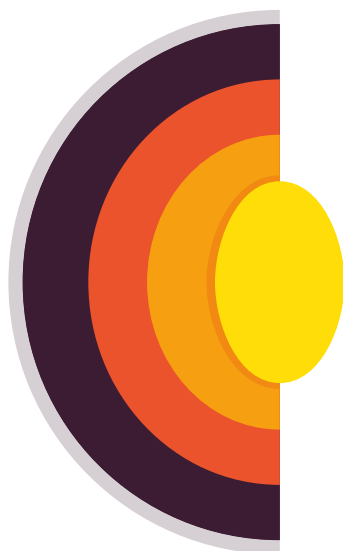
### ADVICES

Sensitive to Clortoluron

Is our own exclusive  **apsoV** patent, complete and effective.

The use of varieties suitable for an early sowing and low-density seeding rate, makes this solution very efficient also from the economic point of view, with costs comparable to the traditional sowing.

The fields results are impressive. An excellent combination among performing genetics, ideal seeding rate, healthy and protected plants, offers the chance to constantly maximize yields.



### Sepiret Silver®

- **film coating:** ensure the adhesion of all components to the seed, reducing dust and increasing smoothness

### **LANGIS®**

- **insecticide:** pyrethroid insecticide effective against wireworms and other soil insects in the early stages of plant growth

### **Ympact®**


- **fertilizer:** improves germination and availability of nutrients, thanks to the complex of organic and minerals active matter that penetrate the seed


### **Systiva®**

- **fungicide:** guarantees a greater number of flowering healthy plants given that it is the only treatment which thwarts foliar diseases, such as helminthosporium and septoria from planting to booting

## Why Choose QUALIDOSE ?

 High yielding varieties

 Safety in early sowing

 Full comprehensive protection from fungi and insects

 Efficiency of high value treatments

 Perfect seeding ratio

 Outstanding value for the money

	VARIETY	TYPE	PLANTING RATE seeds/mq	BAGS/HA no.	SEEDS/BAG no.
<b>Wheat</b>	Acuna	Bread	300	4	750.000
<b>Durum</b>	Platone	High quality	285	5	570.000
<b>Barley</b>	Fenice	Six rows feed	200	5	400.000
	Idra	Two rows feed	225	5	450.000

# Acuna

T5.03.04 x Solehio - [2021]

## Bread wheat



### FEATURES

HEIGHT	medium
EAR	awned
GRAIN COLOUR	red
GROWTH HABITUS	mid-alternative
EARLINESS	early

### QUALITIES

HECTOLITRIC WEIGHT	good 79-81 kg/hl
TKW	good 40-42 g
ALVEOGRAPH	W:150-200 - P/L:0,6-0,8
HARDNESS	medium-hard
PROTEIN CONTENT	medium

### RESISTANCES

LODGING			MR
COLD			R
MILDEW			MR
LEAF RUST			R
YELLOW RUST			R
SEPTORIA			MR
FUSARIUM			R

### ADVICES

Tolerant to Clortoluron

# Aleppo

Bologna x ((Blasco x Zena) x Enesco) - [2016]

## High quality bread wheat



### FEATURES

HEIGHT	medium
EAR	awned
GRAIN COLOUR	white
GROWTH HABITUS	mid-winter
EARLINESS	medium

### QUALITIES

HECTOLITRIC WEIGHT	high 81-83 kg/hl
TKW	low 34-36 g
ALVEOGRAPH	W:280-340 - P/L:0,4-0,6
HARDNESS	hard
PROTEIN CONTENT	high

### RESISTANCES

LODGING			MR
COLD			R
MILDEW			MR
LEAF RUST			MR
YELLOW RUST			MR
SEPTORIA			MR
FUSARIUM			MR

### ADVICES

Tolerant to Clortoluron



# Apulia

Relmo2330 x Bologna - [2022]

## Top quality bread wheat



FEATURES	HEIGHT	medium
	EAR	awned
	GRAIN COLOUR	red
	GROWTH HABITUS	alternative
	EARLINESS	early

QUALITIES	HECTOLITRIC WEIGHT	good 79-81 kg/hl
	TKW	low 34-36 g
	ALVEOGRAPH	W:340-440 - P/L:0,7-1,0
	HARDNESS	hard
	PROTEIN CONTENT	high

RESISTANCES	LODGING			MR
	COLD			R
	MILDEW			R
	LEAF RUST		MS	
	YELLOW RUST			R
	SEPTORIA			R
	FUSARIUM			MR

ADVICES Tolerant to Clortoluron

# Bisanzio

Monblanc x Palladio - [2014]

## Top quality bread wheat



FEATURES	HEIGHT	medium
	EAR	awned
	GRAIN COLOUR	amber
	GROWTH HABITUS	alternative
	EARLINESS	medium-early

QUALITIES	HECTOLITRIC WEIGHT	good 79-81 kg/hl
	TKW	high 43-45 g
	ALVEOGRAPH	W:340-440 -P/L:0,7-1,0
	HARDNESS	hard
	PROTEIN CONTENT	high

RESISTANCES	LODGING				R
	COLD				R
	MILDEW				R
	LEAF RUST		MS		
	YELLOW RUST		MS		
	SEPTORIA			MR	
	FUSARIUM			MR	

ADVICES Tolerant to Clortoluron



# Alagir

Genealogy not available - [2021]

## Bread wheat



### FEATURES

HEIGHT	tall
EAR	awnless
GRAIN COLOUR	red
GROWTH HABITUS	alternative
EARLINESS	early

### QUALITIES

HECTOLITRIC WEIGHT	high 81-83 kg/hl
TKW	medium 37-39 g
ALVEOGRAPH	W:150-200 - P/L:0,6-0,8
HARDNESS	medium-hard
PROTEIN CONTENT	medium

### RESISTANCES

LODGING				R
COLD				R
MILDEW			MR	
LEAF RUST			MR	
YELLOW RUST			MR	
SEPTORIA				R
FUSARIUM			MR	

### ADVICES

Sensitive to Clortoluron



# Alaminos

SY300 x T152 - [2023]

## High quality bread wheat



### FEATURES

HEIGHT	tall
EAR	awned
GRAIN COLOUR	red
GROWTH HABITUS	alternative
EARLINESS	medium-early

### QUALITIES

HECTOLITRIC WEIGHT	high 81-83 kg/hl
TKW	medium 37-39 g
ALVEOGRAPH	W:220-280 - P/L:0,6-0,8
HARDNESS	hard
PROTEIN CONTENT	good

### RESISTANCES

LODGING				R
COLD				R
MILDEW				R
LEAF RUST			MR	
YELLOW RUST			MR	
SEPTORIA				R
FUSARIUM				R

### ADVICES

Tolerant to Clortoluron



# Alegrias

Multiple crossings - [2023]

**High quality bread wheat**



## FEATURES

HEIGHT	medium-tall
EAR	awned
GRAIN COLOUR	white
GROWTH HABITUS	spring
EARLINESS	early

## QUALITIES

HECTOLITRIC WEIGHT	good 79-81 kg/hl
TKW	medium 37-39 g
ALVEOGRAPH	W:200-280 - P/L:0,7-1,0
HARDNESS	hard
PROTEIN CONTENT	high

## RESISTANCES

LODGING		MR
COLD		MR
MILDEW		R
LEAF RUST		R
YELLOW RUST		R
SEPTORIA	MS	
FUSARIUM		MR

## ADVICES

Tolerant to Clortoluron



# Arabia

Guadalupe x Tibet - [2009]

**Bread wheat**



## FEATURES

HEIGHT	medium-tall
EAR	awned
GRAIN COLOUR	white
GROWTH HABITUS	spring
EARLINESS	early

## QUALITIES

HECTOLITRIC WEIGHT	high 81-83 kg/hl
TKW	good 40-42 g
ALVEOGRAPH	W:150-205 - P/L:0,3-0,5
HARDNESS	medium-hard
PROTEIN CONTENT	good

## RESISTANCES

LODGING		MR
COLD		R
MILDEW		MR
LEAF RUST	MS	
YELLOW RUST	MS	
SEPTORIA	MS	
FUSARIUM		MR

## ADVICES

Sensitive to Clortoluron



# Albacete

Genealogy not available - [2024]

**High quality bread wheat**



FEATURES	HEIGHT	medium
	EAR	awned
	GRAIN COLOUR	white
	GROWTH HABITUS	spring
	EARLINESS	early

QUALITIES	HECTOLITRIC WEIGHT	good 79-81 kg/hl
	TKW	medium 37-39 g
	ALVEOGRAPH	W:200-280 - P/L:0,6-0,8
	HARDNESS	hard
	PROTEIN CONTENT	high

RESISTANCES	LODGING				R
	COLD			MR	
	MILDEW				R
	LEAF RUST				R
	YELLOW RUST				R
	SEPTORIA				R
	FUSARIUM			MR	

ADVICES  
Tolerant to Clortoluron



# Atafu

Genealogy not available - [2024]

**High quality bread wheat**



FEATURES	HEIGHT	medium-tall
	EAR	awned
	GRAIN COLOUR	red
	GROWTH HABITUS	alternative
	EARLINESS	early

QUALITIES	HECTOLITRIC WEIGHT	high 81-83 kg/hl
	TKW	medium 37-39 g
	ALVEOGRAPH	W:200-260 - P/L:0,6-0,8
	HARDNESS	hard
	PROTEIN CONTENT	good

RESISTANCES	LODGING				R
	COLD				R
	MILDEW				R
	LEAF RUST				R
	YELLOW RUST			MR	
	SEPTORIA			MR	
	FUSARIUM				R

ADVICES  
Tolerant to Clortoluron

A close-up photograph of durum wheat grains, showing their characteristic elongated, slightly curved shape and golden-yellow color. The grains are piled together, with some in sharp focus in the foreground and others blurred in the background, creating a sense of depth. The lighting is warm and natural, highlighting the texture of the grains.

# DURUM



# Quality classification of main durum wheat varieties

# Earliness and planting time

VARIETY	POSITIVE	NEGATIVE
HIGH QUALITY (> 105)		
AUREO (test)	protein	yield
BERING	yellow ind. + gluten	
SOCRATE	yellow ind. + gluten	
CARTESIO	gluten+protein	
CONFUCIO		
GREGORIO	gluten	
MAMELI	yellow ind. + gluten	
PLATONE	yellow ind. + gluten	
SARAGOLLA (test)	gluten	protein
SVEVO	protein	yield
TIREX	protein	
GOOD QUALITY (105-100)		
CASANOVA		
CLAUDIO (test)		yellow index
SENECA	yellow index	
SIMETO (test)		
MEDIUM QUALITY (99-95)		
DUILIO (test)		yellow ind.
LOW QUALITY (< 95)		
IRIDE		protein

EARLYNESS

LATE

MEDIUM

EARLY

SOCRATE

PLATONE

MAMELI

CONFUCIO  
SENECA  
BERING

CASANOVA

GREGORIO  
CARTESIO

TIREX

EARLY

MEDIUM


LATE

PLANTING TIME

Global quality index =  
protein (40%) + gluten index (30%) + yellow index (20%) +spec. weight (10%)

Main source: C.R.E.A. / Data processing: Apsovementi

# Varietal profile

	FEATURES							RESISTANCES							QUALITIES				
	QUALIDOSE	QUALITY	HEIGHT	EAR	AWNS COLOUR	EARLINESS	LODGING	COLD	MILDEW	LEAF RUST	YELLOW RUST	SEPTORIA	FUSARIUM	HECTOL WEIGHT (kg/hl)	TKW (g)	VITROSITY	PROTEIN CONTENT	GLUTEN INDEX	YELLOW INDEX
BERING		HQ	MT	NH	WH	M	MR	R	R	MR	R	MS	MR	high 82-84	high 50-52	H	H	high 85-95	high 24-26
CARTESIO		HQ	M	NH	BL	E	MR	MR	MR	MR	MR	MR	MR	high 82-84	high 50-52	H	H	high 85-95	high 24-26
CASANOVA		GQ	MT	NH	WH	ME	MR	R	MR	MR	R	MS	MR	high 82-84	high 50-52	G	GO	good 75-85	good 22-24
CONFUCIO		HQ	M	NH	BL	M	MR	R	MS	R	R	MR	MR	good 80-82	good 47-49	H	H	high 85-95	high 24-26
GREGORIO		HQ	M	NH	BR	E	MR	R	MS	R	MR	MR	MR	high 82-84	good 47-49	H	H	high 85-95	high 24-26
KENOBI		GQ	MT	NH	WH	E	MR	MR	R	MS	MR	MR	MR	high 82-84	high 50-52	G	GO	good 75-85	good 22-24
MAMELI		HQ	M	H	BR	M	R	R	R	MR	MR	MR	MR	high 82-84	good 47-49	H	H	high 85-95	high 24-26
PLATONE		HQ	M	H	BL	M	R	R	R	MR	MR	R	R	high 82-84	high 50-52	H	H	high 85-95	high 24-26
SENECA		GQ	M	H	BL	M	MR	R	MR	R	R	MR	MR	high 82-84	high 50-52	H	GO	good 75-85	high 24-26
SOCRATE		HQ	MS	NH	WH	ML	R	R	R	MR	R	R	MR	high 82-84	high 50-52	H	GO	high 85-95	high 24-26
TEODORICO		HQ	M	NH	WH	E	MR	MR	R	R	MR	MR	MR	high 82-84	good 47-49	H	GO	high 85-95	good 22-24
TIREX		HQ	MT	H	BR	E	MR	MR	R	MS	MS	MR	MR	good 80-82	high 50-52	H	H	high 85-95	high 24-26

QUALITY: HQ= high quality durum wheat; GQ= Good quality durum wheat - HEIGHT: S=short; M=medium; MH= medium-high; H= high - EAR: H=hairy; NH=not hairy - AWNS COLOUR: BR=brown; BL=black; WH=white - EARLINESS: E= early; L=late ML=medium-late; ME=medium-early; M=medium - RESISTANCES: R=resistant; MR=mid-resistant; MS=mid-sensitive; S=sensitive - PROTEIN CONTENT: H=high; M=medium; GO=good - VITROSITY: H=high; G=good



# Socrate

Daurur x Odisseo - [2023]

## High quality durum wheat



### FEATURES

HEIGHT	medium-short
EAR	not hairy
AWNS COLOUR	white
EARLINESS	medium-late

### QUALITIES

HECTOLITRIC WEIGHT	high 82-84 kg/hl
TKW	high 50-52 g
VITROSITY	high
PROTEIN CONTENT	good
GLUTEN INDEX	high 85-95
YELLOW INDEX	high 24-26

### RESISTANCES

LODGING				R
COLD				R
MILDEW				R
LEAF RUST			MR	
YELLOW RUST				R
SEPTORIA				R
FUSARIUM			MR	



# Platone

Isildur x Tirez - [2016]

## High quality durum wheat



### FEATURES

HEIGHT	medium
EAR	hairy
AWNS COLOUR	black
EARLINESS	medium

### QUALITIES

HECTOLITRIC WEIGHT	high 82-84 kg/hl
TKW	high 50-52 g
VITROSITY	high
PROTEIN CONTENT	high
GLUTEN INDEX	high 85-95
YELLOW INDEX	high 24-26

### RESISTANCES

LODGING				R
COLD				R
MILDEW				R
LEAF RUST			MR	
YELLOW RUST			MR	
SEPTORIA				R
FUSARIUM				R



# Mameli

Tirex x Karur - [2018]

## High quality durum wheat



FEATURES	HEIGHT	medium
	EAR	hairy
	AWNS COLOUR	brown
	EARLINESS	medium

QUALITIES	HECTOLITRIC WEIGHT	high 82-84 kg/hl
	TKW	good 47-49 g
	VITROSITY	high
	PROTEIN CONTENT	high
	GLUTEN INDEX	high 85-95
	YELLOW INDEX	high 24-26

RESISTANCES	LODGING				R
	COLD				R
	MILDEW				R
	LEAF RUST			MR	
	YELLOW RUST			MR	
	SEPTORIA			MR	
	FUSARIUM			MR	



# Bering

Casanova x Colombo - [2018]

## High quality durum wheat



FEATURES	HEIGHT	medium-tall
	EAR	not hairy
	AWNS COLOUR	white
	EARLINESS	medium

QUALITIES	HECTOLITRIC WEIGHT	high 82-84 kg/hl
	TKW	high 50-52 g
	VITROSITY	high
	PROTEIN CONTENT	high
	GLUTEN INDEX	high 85-95
	YELLOW INDEX	high 24-26

RESISTANCES	LODGING			MR	
	COLD				R
	MILDEW				R
	LEAF RUST			MR	
	YELLOW RUST				R
	SEPTORIA		MS		
	FUSARIUM			MR	



# Seneca

Genealogy not available - [2023]

**Good quality durum wheat**



## FEATURES

HEIGHT	medium
EAR	hairy
AWNS COLOUR	black
EARLINESS	medium

## QUALITIES

HECTOLITRIC WEIGHT	high 82-84 kg/hl
TKW	high 50-52 g
VITROSITY	high
PROTEIN CONTENT	good
GLUTEN INDEX	good 75-85
YELLOW INDEX	high 24-26

## RESISTANCES

LODGING			MR
COLD			R
MILDEW			MR
LEAF RUST			R
YELLOW RUST			R
SEPTORIA			MR
FUSARIUM			MR



# Confucio

Ramirez x Dylan - [2022]

**High quality durum wheat**



## FEATURES

HEIGHT	medium
EAR	not hairy
AWNS COLOUR	black
EARLINESS	medium

## QUALITIES

HECTOLITRIC WEIGHT	good 80-82 kg/hl
TKW	good 47-49 g
VITROSITY	high
PROTEIN CONTENT	high
GLUTEN INDEX	high 85-95
YELLOW INDEX	high 24-26

## RESISTANCES

LODGING			MR
COLD			R
MILDEW		MS	
LEAF RUST			R
YELLOW RUST			R
SEPTORIA			MR
FUSARIUM			MR





# Casanova

(Flavio x Siene) x Duilio - [2003]

## Good quality durum wheat

### FEATURES

HEIGHT	medium-tall
EAR	not hairy
AWNS COLOUR	white
EARLINESS	medium-early

### QUALITIES

HECTOLITRIC WEIGHT	high 82-84 kg/hl
TKW	high 50-52 g
VITROSITY	good
PROTEIN CONTENT	good
GLUTEN INDEX	good 75-85
YELLOW INDEX	good 22-24

### RESISTANCES

LODGING			MR
COLD			R
MILDEW			MR
LEAF RUST			MR
YELLOW RUST			R
SEPTORIA		MS	
FUSARIUM			MR



# Tirex

Svevo x Nefer - [2007]

## High quality durum wheat



### FEATURES

HEIGHT	medium-tall
EAR	hairy
AWNS COLOUR	brown
EARLINESS	early

### QUALITIES

HECTOLITRIC WEIGHT	good 80-82 kg/hl
TKW	high 50-52 g
VITROSITY	high
PROTEIN CONTENT	high
GLUTEN INDEX	high 85-95
YELLOW INDEX	high 24-26

### RESISTANCES

LODGING			MR
COLD			MR
MILDEW			R
LEAF RUST		MS	
YELLOW RUST		MS	
SEPTORIA			MR
FUSARIUM			MR



# Gregorio

Saragolla x Marco Aurelio - [2019]

## High quality durum wheat



FEATURES	HEIGHT	medium
	EAR	not hairy
	AWNS COLOUR	brown
	EARLINESS	early

QUALITIES	HECTOLITRIC WEIGHT	high 82-84 kg/hl
	TKW	good 47-49 g
	VITROSITY	high
	PROTEIN CONTENT	high
	GLUTEN INDEX	high 85-95
	YELLOW INDEX	high 24-26

RESISTANCES	LODGING			MR
	COLD			R
	MILDEW		MS	
	LEAF RUST			R
	YELLOW RUST			MR
	SEPTORIA			MR
	FUSARIUM			MR



# Cartesio

Ancomarzio x Normanno - [2020]

## High quality durum wheat



FEATURES	HEIGHT	medium
	EAR	not hairy
	AWNS COLOUR	black
	EARLINESS	early



QUALITIES	HECTOLITRIC WEIGHT	high 82-84 kg/hl
	TKW	high 50-52 g
	VITROSITY	high
	PROTEIN CONTENT	high
	GLUTEN INDEX	high 85-95
	YELLOW INDEX	high 24-26

RESISTANCES	LODGING			MR
	COLD			MR
	MILDEW			MR
	LEAF RUST			MR
	YELLOW RUST			MR
	SEPTORIA			MR
	FUSARIUM			MR



# OTHER CEREALS

# Varietal profile

	FEATURES					RESISTANCES							QUALITY		
	QUALIDOSE	HEIGHT	EAR	EARLINESS	GROWTH HABITUS	LODGING	COLD	MILDEW	NET BLOTCH	RYNCHOSPORIUM	BYMV	BYDV	HECTOLITRIC WEIGHT (kg/hl)	TKW (g)	PROTEIN CONTENT
ALASTRO		M	2	ME	A	MR	R	R	MR	MR	R	S	high 68-72	high 48-54	GO
AVIOR		T	6	ME	MA	MR	R	R	R	R	R	R	medium 59-63	high 48-54	GO
BILANCIA		MT	6	ML	W	R	R	R	R	R	R	S	medium 59-63	medium 39-43	GO
COMETA		MS	2	ME	MA	R	MR	R	MR	MR	R	R	high 68-72	high 48-54	GO
DRACO		M	6	ME	MA	MR	R	R	R	MR	R	R	high 68-72	medium 39-43	GO
FENICE		T	6	E	MA	R	R	R	MR	R	R	R	good 64-67	medium 39-43	GO
GEMINI		MT	6	M	MW	R	R	R	MR	R	R	S	good 64-67	high 48-54	H
IDRA		S	2	E	MA	R	R	R	MR	MR	R	R	high 68-72	high 48-54	GO
ORIONE		MS	2	ME	W	R	R	R	R	MR	R	R	high 68-72	high 48-54	GO
PLUTONE		MT	6	M	MW	R	R	R	MR	MR	R	S	high 68-72	high 48-54	GO
SPAZIO		M	2	M	W	MR	R	R	R	MR	R	R	high 68-72	high 48-54	GO
TAURI		MS	2	ME	MA	R	R	R	MR	MR	R	R	high 68-72	high 48-54	M
VIRGINI		M	2	M	A	MR	R	R	R	R	R	R	good 64-67	high 48-54	H

**HEIGHT:** S=short; MS=medium-short; M=media; MT= medium-tall; T= tall - **EAR:** 2=two rows; 6=six rows - **GROWTH HABITUS:** A= alternative; MA= mid-alternative; MW= mid-winter; W=winter - **EARLINESS** - E=early; ME=medium-early; M=medium; ML=medium-late; L=late - **RESISTANCES:** R=resistant; MR=mid-resistant; MS=mid-sensitive; S=sensitive - **PROTEIN CONTENT:** H=high; M=medium; GO=good







# Virginii

FIO1347 x Alastro - [2022]

## Two rows feed barley



FEATURES	HEIGHT	medium
	EAR	two rows
	EARLINESS	medium
	GROWTH HABITUS	alternative

QUALITIES	HECTOLITRIC WEIGHT	good 64-67 kg/hl
	TKW	high 48-54 g
	PROTEIN CONTENT	high

RESISTANCES	LODGING			MR
	COLD			R
	MILDEW			R
	NET BLOTCH			R
	RHYNCHOSPORIUM			R
	BYMV			R
	BYDV			R



# Tauri

Fior 11780 x Alastro - [2023]

## Two rows feed barley



FEATURES	HEIGHT	medium-short
	EAR	two rows
	EARLINESS	medium-early
	GROWTH HABITUS	mid-alternative

QUALITIES	HECTOLITRIC WEIGHT	high 68-72 kg/hl
	TKW	high 48-54 g
	PROTEIN CONTENT	medium

RESISTANCES	LODGING				R
	COLD				R
	MILDEW				R
	NET BLOTCH			MR	
	RHYNCHOSPORIUM			MR	
	BYMV				R
	BYDV				R





# Cometa

(Amillis x Fior 2377) x PO202.169 - [2006]

## Two rows feed barley



FEATURES	HEIGHT	medium-short
	EAR	two rows
	EARLINESS	medium-early
	GROWTH HABITUS	mid-alternative

QUALITIES	HECTOLITRIC WEIGHT	high 68-72 kg/hl
	TKW	high 48-54 g
	PROTEIN CONTENT	good

RESISTANCES	LODGING				R
	COLD			MR	
	MILDEW				R
	NET BLOTCH			MR	
	RHYNCHOSPORIUM			MR	
	BYMV				R
	BYDV				R



# Idra

Cometa x Fior 5285 - [2012]

## Two rows feed barley



FEATURES	HEIGHT	short
	EAR	two rows
	EARLINESS	early
	GROWTH HABITUS	mid-alternative

QUALITIES	HECTOLITRIC WEIGHT	high 68-72 kg/hl
	TKW	high 48-54 g
	PROTEIN CONTENT	good

RESISTANCES	LODGING				R
	COLD				R
	MILDEW				R
	NET BLOTCH			MR	
	RHYNCHOSPORIUM			MR	
	BYMV				R
	BYDV				R



# Plutone

Laverda x Azzurro - [2023]

## Six rows feed barley



FEATURES	HEIGHT	medium-tall
	EAR	six rows
	EARLINESS	medium
	GROWTH HABITUS	mid-winter

QUALITIES	HECTOLITRIC WEIGHT	high 68-72 kg/hl
	TKW	high 48-54 g
	PROTEIN CONTENT	good

RESISTANCES	LODGING				R
	COLD				R
	MILDEW				R
	NET BLOTCH			MR	
	RHYNCHOSPORIUM			MR	
	BYMV				R
	BYDV	S			



# Avior

Rafaela x Atlante - [2023]

## Six rows feed barley



FEATURES	HEIGHT	tall
	EAR	six rows
	EARLINESS	medium-early
	GROWTH HABITUS	mid-alternative

QUALITIES	HECTOLITRIC WEIGHT	medium 59-63 kg/hl
	TKW	high 48-54 g
	PROTEIN CONTENT	good

RESISTANCES	LODGING			MR	
	COLD				R
	MILDEW				R
	NET BLOTCH				R
	RHYNCHOSPORIUM				R
	BYMV				R
	BYDV				R



# Draco

Etincel x Cometa - [2023]

## Six rows feed barley



FEATURES	HEIGHT	medium
	EAR	six rows
	EARLINESS	medium-early
	GROWTH HABITUS	mid-alternative

QUALITIES	HECTOLITRIC WEIGHT	high 68-72 kg/hl
	TKW	medium 39-43 g
	PROTEIN CONTENT	good

RESISTANCES	LODGING			MR
	COLD			R
	MILDEW			R
	NET BLOTCH			R
	RHYNCHOSPORIUM			MR
	BYMV			R
	BYDV			R



# Fenice

FIO12002 x (Sixtine x Ketos) – [2020]

## Six rows feed barley



FEATURES	HEIGHT	tall
	EAR	six rows
	EARLINESS	early
	GROWTH HABITUS	mid-alternative

QUALITIES	HECTOLITRIC WEIGHT	good 64-67 kg/hl
	TKW	medium 39-43 g
	PROTEIN CONTENT	good

RESISTANCES	LODGING				R
	COLD				R
	MILDEW				R
	NET BLOTCH			MR	
	RHYNCHOSPORIUM				R
	BYMV				R
	BYDV				R



# Bilancia

Laverda x Shangrila – [2020]

## Six rows feed barley



FEATURES	HEIGHT	medium-tall
	EAR	six rows
	EARLINESS	medium-late
	GROWTH HABITUS	winter

QUALITIES	HECTOLITRIC WEIGHT	medium 59-63 kg/hl
	TKW	medium 39-43 g
	PROTEIN CONTENT	good

RESISTANCES	LODGING				R
	COLD				R
	MILDEW				R
	NET BLOTCH				R
	RHYNCHOSPORIUM				R
	BYMV				R
	BYDV	S			



# Gemini

Explora x (Laverda x Azzurro) - [2022]

## Six rows feed barley



FEATURES	HEIGHT	medium-tall
	EAR	six rows
	EARLINESS	medium
	GROWTH HABITUS	mid-winter

QUALITIES	HECTOLITRIC WEIGHT	good 64-67 kg/hl
	TKW	high 48-54 g
	PROTEIN CONTENT	high

RESISTANCES	LODGING				R
	COLD				R
	MILDEW				R
	NET BLOTCH			MR	
	RHYNCHOSPORIUM				R
	BYMV				R
	BYDV	S			



# Prevision

Genealogy not available



## FEATURES

HEIGHT	medium-tall
EARLINESS	medium-early
GRAIN COLOUR	red
STEM	medium-large

## RESIST.

LODGING	S	
COLD		MS
CROWN RUST		MS

## QUALITIES

HECTOLITRIC WEIGHT	medium
TKW	high
PROTEIN CONTENT	medium
PURPOSE	forage and grain

# Genziana

(Bulban x Weibull 17578) x (Moore x Angelica) - [2002]

## FEATURES

HEIGHT	medium
EARLINESS	medium-early
GRAIN COLOUR	white
STEM	medium

## RESIST.

LODGING				R
COLD			MR	
CROWN RUST		MS		

## QUALITIES

HECTOLITRIC WEIGHT	high
TKW	high
PROTEIN CONTENT	good
PURPOSE	grain, food

# Hamel

Johanna x Coolabah - [2000]



## FEATURES

HEIGHT	medium-tall
EARLINESS	medium-late
GRAIN COLOUR	white
STEM	medium

## RESIST.

LODGING			MR
COLD			MR
CROWN RUST			MR

## QUALITIES

HECTOLITRIC WEIGHT	good
TKW	high
PROTEIN CONTENT	good
PURPOSE	forage and grain





# Rossella

(Altgold rotkorn x Spada) x linea Altgold - [2016]

## Spelt wheat

### FEATURES

HEIGHT	medium-tall
GROWTH HABITUS	alternative
EARLINESS	medium-early

### QUALITIES

TKW	good 42-54 g
PROTEIN CONTENT	good
PURPOSE	bread

### RESISTANCES

LODGING			MR
COLD			R
MILDEW			R
LEAF RUST			MR
YELLOW RUST		MS	
SEPTORIA			MR



# Giovanni Paolo

Multiple crossings - [2008]

## Emmer wheat

### FEATURES

HEIGHT	medium
GROWTH HABITUS	alternative
EARLINESS	medium

### QUALITIES

TKW	good 48-56 g
PROTEIN CONTENT	high
PURPOSE	pasta, whole grain

### RESISTANCES

LODGING				R
COLD				R
MILDEW				R
LEAF RUST				R
YELLOW RUST			MR	
SEPTORIA			MR	

# Trivalan

Genealogy unavailable - [2016]



FEATURES	HEIGHT	tall
	EAR	long, curved
	EARLINESS	medium
	GROWTH HABITUS	mid-alternative

RESISTANCES	LODGING				R
	COLD				R
	MILDEW			MR	
	LEAF RUST			MR	
	YELLOW RUST			MR	
	SEPTORIA				R

QUALITIES	HECTOLITRIC WEIGHT	medium
	TKW	medium
	PURPOSE	biomass, grain

# Narciso

Genealogy unavailable - [2024]



FEATURES	HEIGHT	tall
	EAR	long, curved
	EARLINESS	medium
	GROWTH HABITUS	winter

RESISTANCES	LODGING				R
	COLD				R
	MILDEW				R
	LEAF RUST				R
	YELLOW RUST				R
	SEPTORIA				R

QUALITIES	HECTOLITRIC WEIGHT	high
	TKW	medium
	PURPOSE	biomass, grain

# Sileno

FT723 x Precocius - [2016]



FEATURES	HEIGHT	tall
	EAR	long, curved
	EARLINESS	medium-early
	GROWTH HABITUS	mid-alternative

RESISTANCES	LODGING				R
	COLD				R
	MILDEW				R
	LEAF RUST				R
	YELLOW RUST		MS		
	SEPTORIA			MR	

QUALITIES	HECTOLITRIC WEIGHT	high
	TKW	good
	PURPOSE	biomass, grain

# Satiro

Bienvenue x (Partout x Oceania) - [2017]



## FEATURES

HEIGHT	medium-tall
EAR	medium, erect
EARLINESS	early
GROWTH HABITUS	alternative

## QUALITIES

HECTOLITRIC WEIGHT	high
TKW	medium
PURPOSE	biomass, grain

## RESISTANCES

LODGING				R
COLD				R
MILDEW				R
LEAF RUST				R
YELLOW RUST				R
SEPTORIA				R

# Etere

Trimour x Amarillo 105 - [2020]



## FEATURES

HEIGHT	medium-tall
EAR	long, erect
EARLINESS	early
GROWTH HABITUS	alternative

## QUALITIES

HECTOLITRIC WEIGHT	high
TKW	medium
PURPOSE	biomass, grain

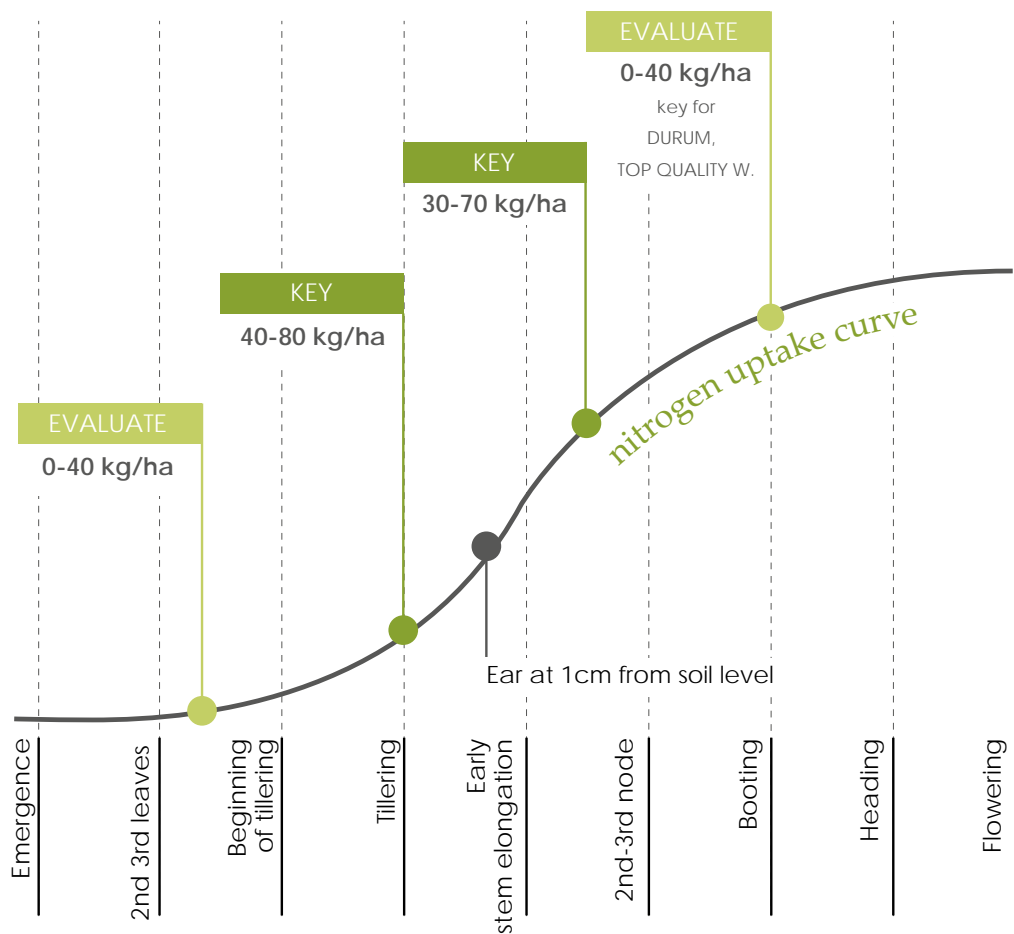
## RESISTANCES

LODGING				R
COLD				R
MILDEW			MR	
LEAF RUST			MR	
YELLOW RUST				R
SEPTORIA				R

# Nitrogen fertilization for straw cereals

Average nitrogen requirement per Ton of grain produced

Species/or quality class	DURUM TOP QUAL. BREAD	HIGH QUAL. BREAD WHEAT	BREAD WHEAT	TRITICALE	BISCUITS WHEAT	BARLEY - OAT
Kg of Nitrogen	31	28	25	23	21	18



IT'S IMPORTANT TO REMEMBER THAT:

- Nitrogen input must be scheduled with the aim of supplying the plant with the right amount of this nutrient, taking into account the plant development stage, the growing environment and the yield target.
- High inputs in the early stages can lead to an hyper-vegetation, with the following possible effects: increased risk of diseases and lodging, imbalance between the vegetative and the reproductive phase.
- Later nitrogen applications - from the stem elongation phase onwards - directly impact on the accumulation of proteins in the kernels.
- Staggered nitrogen inputs are always recommended to improve the absorption efficiency of nutrients and to match the growing needs of the crop.

# CHICKPEA: crop management

From December to April, later planting is possible in certain areas where spring and summer are not too hot and dry.

A minimum temperature of 9°-10°C is required for germination. To obtain 35-40 plants/m2 seeding rate is 45-50 seeds/m2 (130-250 kg/ha based on TKW). The distance between the rows is 45-50 cm for hoed crops and 30-35 cm with cereal planter. Tamping should be performed in order to protect the seeds from the anti-germination effect of herbicide as well as facilitating harvesting.

Chickpea is a pulse with nitrogen-fixing activity carried out by symbiotic bacteria of the genus Rhizobium. We therefore recommend a pre-planting of 60-120 units/ha or localized at sowing time 5-20 units of Phosphorus.

In order to speed up the process should conditions be harsh (significant nitrogen deficiency, strong run-off before sowing, crop precessions particularly exploiting), 20-30 units/ha of Nitrogen could be added.

Pre-emergence: - pendimethalin. – pendimethalin + aclonifen.

Post-emergence: pyridate for the dicotyledons control.

It is possible once 14% moisture content is reached, by using preferably axial-flow combine harvester, with beater speed setting of 350-500 rpm, large holed sieves, maximum ventilation.

## SOWING

## NUTRITION

## WEED CONTROL

## HARVEST



# Alamo

Purpose:food



### FEATURES

HEIGHT	medium 60-70 cm
PLANT	mid-erect
EARLINESS	medium
FLOWER COLOUR	white
GROWTH HABITUS	alternative

### QUALITIES

GRAIN TYPE	rough
TKW	380-470 g
CALIBER >9	45%
CALIBER >8	45%
CALIBER >7	10%

\*average data based on TKW of 420 g

### RESISTANCES

LODGING				R
COLD			MR	
DEHISCENCE				R
ASCOCHYTA R.			MR	





# Faquir

Genealogy unavailable

FEATURES	HEIGHT	medium-tall
	EARLINESS	medium-late
	GRAIN COLOUR	green
	GROWTH HABITUS	winter

RESIST.	LODGING			MR
	COLD			R
	DEHISCENCE			R



QUALITIES	HECTOL. WEIGHT	good
	TKW	220-240 g
	PROTEIN CONTENT	good
	PURPOSE	grain, food

# Furious

Genealogy unavailable

FEATURES	HEIGHT	medium-tall
	EARLINESS	medium
	GRAIN COLOUR	yellow
	GROWTH HABITUS	winter

RESIST.	LODGING			MR
	COLD			R
	DEHISCENCE			R



QUALITIES	HECTOL. WEIGHT	high
	TKW	190-230 g
	PROTEIN CONTENT	good
	PURPOSE	grain

# LG Auris

Genealogy unavailable

FEATURES	HEIGHT	medium
	EARLINESS	medium-early
	GRAIN COLOUR	yellow
	GROWTH HABITUS	alternative

RESIST.	LODGING			MR
	COLD			R
	DEHISCENCE			R



QUALITIES	HECTOL. WEIGHT	high
	TKW	200-240 g
	PROTEIN CONTENT	good
	PURPOSE	grain





# Galactic

Genealogy unavailable

FEATURES	HEIGHT	medium
	EARLINESS	early
	GRAIN COLOUR	yellow
	GROWTH HABITUS	alternative

RESIST.	LODGING			MR
	COLD			R
	DEHISCENCE			R

QUALITIES	HECTOL. WEIGHT	good
	TKW	200-240 g
	PROTEIN CONTENT	good
	PURPOSE	grain



# Peps

Genealogy unavailable

FEATURES	HEIGHT	medium
	EARLINESS	medium
	GRAIN COLOUR	green
	GROWTH HABITUS	spring

RESIST.	LODGING			MR
	COLD			MR
	DEHISCENCE			R

QUALITIES	HECTOL. WEIGHT	good
	TKW	200-240 g
	PROTEIN CONTENT	good
	PURPOSE	grain, food



# Poseidon

Genealogy unavailable

FEATURES	HEIGHT	medium
	EARLINESS	medium
	GRAIN COLOUR	green
	GROWTH HABITUS	spring

RESIST.	LODGING			MR
	COLD			MR
	DEHISCENCE			R

QUALITIES	HECTOL. WEIGHT	high
	TKW	230-270 g
	PROTEIN CONTENT	good
	PURPOSE	grain, food





# Irena

Fava bean

CARATTERI

HEIGHT	medium
EARLINESS	early
GRAIN COLOUR	light-brown
FLOWER COLOUR	white

COLD				R
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QUALITA

TKW	high 550-700 g
PROTEIN CONTENT	good
ANTINUTR. FACTORS	low
PURPOSE	animal feed

# Prothabat

Fava bean

CARATTERI

HEIGHT	medium
EARLINESS	early
GRAIN COLOUR	light brown
FLOWER COLOUR	white

COLD			MR
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QUALITA

TKW	high 550-700 g
PROTEIN CONTENT	good
ANTINUTR. FACTORS	medium
PURPOSE	animal feed



# Lorenzo

Common vetch

CARATTERI

HEIGHT	medium-tall
EARLINESS	medium-early
GRAIN COLOUR	branched
FLOWER COLOUR	purple pink

COLD			MR
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QUALITA

TKW	medium
PURPOSE	forage, cover crop

# Villotta

Hairy vetch

**NEW**

CARATTERI

HEIGHT	medium
EARLINESS	medium
GRAIN COLOUR	very branched
FLOWER COLOUR	blue

COLD				R
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QUALITA

TKW	low
PURPOSE	forage, cover crop





# FORAGE CROP

# Realfieno

Purpose: hay, pasture, cover crop

## Forage mixtures

### FEATURES

HEIGHT	medium-tall
EARLINESS	medium
GROWTH HABITUS	winter
REGROWTH	high

### QUALITIES

LATE DACTYLIS GLOMERATA	30%
LATE FESTUCA ARUNDINACEA	20%
PERENNIAL TETRAPLOID LOLIUM	15%
PERENNIAL DIPLOID LOLIUM	10%
PHLEUM PRATENSE	10%
TRIFOLIUM PRATENSE	10%
TRIFOLIUM REPENS (WHITE CLOVER)	5%

### RESISTANCES

LODGING				R
COLD				R

# Italturbo

Purpose: hay, silage

## Raygrass mix



### FEATURES

HEIGHT	tall
EARLINESS	medium-late
GROWTH HABITUS	winter
REGROWTH	good

### QUALITIES

TETRAPLOID LOLIUM ITALICUM	50%
DIPLOID LOLIUM ITALICUM	30%
TETRAPLOID LOLIUM WESTERVOLDICUM	20%

### RESISTANCES

LODGING				R
COLD			MR	





# Peleton

Purpose: hay, silage

**Lolium Westervoldicum Tetra**



FEATURES

HEIGHT	tall
STEM DIMENSION	medium

QUALITIES

EARLINESS	late
GROWTH HABITUS	alternative
REGROWTH	high

RESISTANCES

LODGING				MR
COLD				R

# Galactico

Purpose: hay, silage

**Lolium Westervoldicum Tetra**



FEATURES

HEIGHT	tall
STEM DIMENSION	medium

QUALITIES

EARLINESS	early
GROWTH HABITUS	alternative
REGROWTH	low

RESISTANCES

LODGING				MR
COLD				R

# Surrey Nova

Purpose: hay

**Lolium Westervoldicum Diplo**

FEATURES

HEIGHT	tall
STEM DIMENSION	thin

QUALITIES

EARLINESS	early
GROWTH HABITUS	alternative
REGROWTH	low

RESISTANCES

LODGING				R
COLD				R



# Super OM

Purpose: hay and silage

## Awnless barleys blend



### FEATURES

HEIGHT	tall
EARLINESS	early
GROWTH HABITUS	alternative

### QUALITIES

TWO ROWS AWNLESS BARLEY	weight	60%	no. of seeds	50%
SIX ROWS AWNLESS BARLEY	weight	40%	no. of seeds	50%

### RESISTANCES

LODGING			MR
COLD			MR
MILDEW			MR
NET BLOTCH			MR
RHYNCHOSPORIUM			MR



# Super TM

Purpose: hay and silage

## Awnless triticales and wheats blend



### FEATURES

HEIGHT	very tall
EARLINESS	medium
GROWTH HABITUS	alternative

### QUALITIES

AWNLESS SOFT WHEAT	weight	30%	no. of seeds	29%
AWNLESS TRITICALE TALL SIZE	weight	35%	no. of seeds	35%
AWNLESS TRITICALE VERY TALL SIZE	weight	35%	no. of seeds	36%

### RESISTANCES

LODGING			MR
COLD			R
MILDEW			R

# Mantova Pro

Purpose: hay and silage

## Cereals and pulses mix



FEATURES	HEIGHT	tall
	EARLINESS	medium-late
	GROWTH HABITUS	winter

COMPOSITION	WHEAT	74%	70%
	OAT	13%	17%
	VETCH	13%	13%
		weight	no. of seeds

RESIST.	LODGING				R
	COLD				R

* NUTRITIONAL DATA	DM	29,0	[%]
	PROTEIN	12,5	[%DM]
	FAT	2,9	[%DM]
	ADF	32,0	[%DM]
	ADL	5,0	[%DM]
	NDF	55,0	[%DM]

\*average analysis data on silage

QUALITIES	ASH	8,0	[%S.S.]
	LACTIC ACID	2,4	[%S.S.]
	ACETIC ACID	0,8	[%S.S.]
	AMMON. NITROGEN	6,0	[% NH4/N]
	PH	4,0	
	NDF DIGEST. AT 30H	62,0	[%NDF]

# Silos Pro

Purpose: silage

## Cereals and pulses mix



FEATURES	HEIGHT	tall
	EARLINESS	medium
	GROWTH HABITUS	winter

COMPOSITION	WHEAT	22%	40%
	VETCH	10%	10%
	TRITICALE	16%	25%
	PEA	52%	25%
		weight	no. of seeds

RESIST.	LODGING				R
	COLD				R

* NUTRITIONAL DATA	DM	29,0	[%]
	PROTEIN	13,3	[%DM]
	FAT	2,7	[%DM]
	ADF	33,0	[%DM]
	ADL	5,5	[%DM]
	NDF	51,0	[%DM]

\*average analysis data on silage

QUALITIES	ASH	8	[%S.S.]
	LACTIC ACID	2,4	[%S.S.]
	ACETIC ACID	0,8	[%S.S.]
	AMMON. L NITROGEN	7,0	[% NH4/N]
	PH	4,2	
	NDF DIGEST. AT 30H	57,0	[%NDF]



# Loietto Pro

Purpose: hay and silage

Cereals and pulses mix



FEATURES

HEIGHT	medium-tall
EARLINESS	medium
GROWTH HABITUS	winter

RESIST.

LODGING				MR
COLD				R

\* NUTRITIONAL DATA

DM	35,0	[%]
PROTEIN	12,0	[%DM]
FAT	2,5	[%DM]
ADF	28,0	[%DM]
ADL	4,1	[%DM]
NDF	52,0	[%DM]

\*average analysis data on silage  
after 1 withering day

COMPOSITION

WHEAT	60%	31%
OAT	15%	10%
VETCH	15%	8%
RAYGRASS	10%	51%

COMPOSITION

ASH	7,5	[%S.S.]
LACTIC ACID	1,6	[%S.S.]
ACETIC ACID	0,5	[%S.S.]
AMMON. NITROGEN	2,9	[%Nsol/Ntot]
PH	4,0	
NDF DIGEST. AT 30H	58,0	[%NDF]

# Trilo Pro

Purpose: green forage, hay and pasture

Cereals and pulses mix



FEATURES

HEIGHT	medium-tall
EARLINESS	medium
GROWTH HABITUS	winter

RESIST.

LODGING				MR
COLD				R

\* NUTRITIONAL DATA

DM	86,0	[%]
PROTEIN	14,5	[%DM]
FAT	3	[%DM]
ADF	37,0	[%DM]
ADL	6,0	[%DM]
NDF	57,0	[%DM]

\*average analysis data on silage  
after 1 withering day

COMPOSITION

WHEAT	30%	11%
OAT	35%	19%
VETCH	15%	4%
RAYGRASS	10%	36%
EGYPT.+CRIM. CLOVER	10%	30%

QUALITIES

ASH	9,0	[%S.S.]
NDF DIGEST. AT 30H	55	[%NDF]
SOLUBLE PROTEIN	45	[%Nsol/Ntot]





# Akenaton

Berseem clover

FEATURES	HEIGHT	tall
	EARLINESS	medium-early
	FLOWER	white flower head

RESIST.	COLD			MR
	DISEASES			MR

QUALITIES	REGROWTH	very fast
	PRODUCTIVITY	high
	PURPOSE	green forage, hay, pasture

# Maremma

Berseem clover

FEATURES	HEIGHT	tall
	EARLINESS	medium-early
	FLOWER	white flower head

RESIST.	COLD			MR
	DISEASES			MR

QUALITIES	REGROWTH	very fast
	PRODUCTIVITY	high
	PURPOSE	green forage, hay, pasture

# Redhead

Crimson clover

FEATURES	HEIGHT	medium-tall
	EARLINESS	medium-late
	FLOWER	red flower head

RESIST.	COLD				R
	DISEASES			MR	

QUALITIES	REGROWTH	good up to flowering
	PRODUCTIVITY	high
	PURPOSE	green forage, hay, pasture

# Squaroso

Squarrose clover

FEATURES	HEIGHT	tall
	EARLINESS	medium
	FLOWER	white flower head

RESIST.	COLD		MS	
	DISEASES			MR

QUALITIES	REGROWTH	single cut
	PRODUCTIVITY	high
	PURPOSE	green forage, hay, pasture





# La Torre

Selected plants from vogherese landrace - [1994]

## FEATURES

PLANT	erect
HEIGHT	medium-tall
STEM DIMENSION	medium-thin
BRANCHING	high
EARLINESS	mid-early
DORMANCY	dormient (5-6)
AFTER WINTER REGR.	mid-early

## QUALITIES

REGROWTH SPEED	very fast
STEM / LEAVES RATIO	good
LONGEVITY	high
TOLER. TO TRAMPLING	high
STRESS TOLERANCE	good
PURPOSE	hay, silage, dehydrated



# Isola

Selected plants from vogherese landrace - [2001]

## FEATURES

PLANT	erect
HEIGHT	tall
STEM DIMENSION	medium-thin
BRANCHING	high
EARLINESS	early
DORMANCY	dormient (5-6)
AFTER WINTER REGR.	mid-early

## QUALITIES

REGROWTH SPEED	fast
STEM / LEAVES RATIO	high
LONGEVITY	good
TOLER. TO TRAMPLING	good
STRESS TOLERANCE	high
PURPOSE	hay, silage, dehydrated

# Greening Pro

Purpose: hay and silage

## Greening

### FEATURES

HEIGHT	tall
EARLINESS	medium-late
GROWTH HABITUS	alternative

### COMPOSITION

EGYPTIAN CLOVER	5%	n. of seeds	45%
TALL AWNLESS WHEAT	24%	weight	20%
OAT	25%	n. of seeds	24%
PEA	46%	weight	11%

### RESISTANCES

LODGING				R
COLD				R

# Cover Pro

Purpose: green manure, hay

## Cover crop

### FEATURES

HEIGHT	medium
EARLINESS	early
GROWTH HABITUS	alternative

### COMPOSITION

BLACK OAT	19%	n. of seeds	32%
WILD OAT	20%	weight	17%
HAIRY VETCH	26%	n. of seeds	25%
COMMON VETCH	35%	weight	26%

### RESISTANCES

LODGING			MR	
COLD				R

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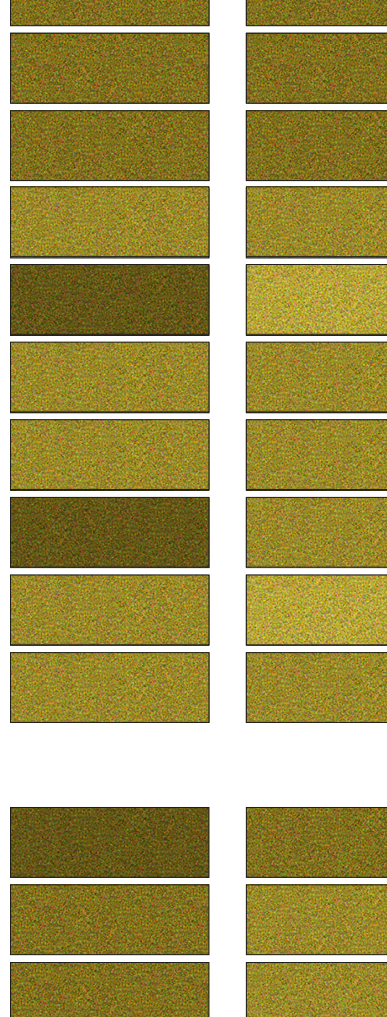
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