

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 launching new varieties and offering excellent services.

We are genetic providers and are at the forefront in terms 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 and we seek to uphold are customer focus, passion for work, dynamism, fairness, cooperation, positivity.





ODSOV 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 have been and remain the basis for high quality seed production.

Today APSOV is still 100% owned by farmers and it is the leader of a group of companies: APSOVSEMENTI SPA (1995), Sementi Maremma (2002), GMAX seeds (2017).

Apsov is the leading italian company in terms of production and marketing of cereals, pulses and oil crops seeds; it runs a multiplication area constantly exceeding 7.000 ha, with a seed production of about 25,000 tons / year; it generates a turnover of 22 mm, steadily increasing, which is the exclusive result of seed activity; it carries out breeding programs for bread and durum wheat, barley, triticale, employing 10 people on a full-time basis.

SOYBEAN cropping: nitrogen

SYMBIOSIS AND NITROGEN-FIXATION

Nodules must be present on the roots and should gradually turn into reddish colour, indicating nitrogen fixation has started.

Otherwise, it is necessary to proceed with fertilization.

Possible reasons for the loss of symbiosis are:

• the absence of a specific rhizobium,

the Bradyrhizobium japonicum is not present in our soils. It is always recommended to use selected strains, more efficient than natural ones.

- excess of nitric nitrogen in the soil.
- · compact soils and water lodging

that prevent atmospheric nitrogen to get into contact with the nodules.

• the excessive soil acidity, the lack of Molybdenum.



NITROGEN BALANCE

Uptake:

 $60~{\rm Kg}~{\rm N}$ per ton of produced grain $100~{\rm Kg}~{\rm N/ha}$ for the plant development

Input:

250 Kg N/ha are supplied by rhizobia + 70 Kg N/ha root uptake + fertilization (see table)

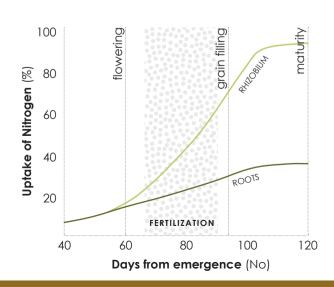
WHEN TO FERTILIZE

The formation of nodules is strongly inhibited by the presence of nitric nitrogen, therefore nitrogen fertilizer must be applied only between the end of flowering and the grain filling stage.

IT'S IMPORTANT TO REMEMBER THAT:

- A late input can also be applied in liquid form along with treatments against worms or red spider mite.
- Organic fertilizers (including manure application) is positive, as it does not affect rhizobium activity.

FERTILIZATION kg N/ha	UPTAKE kg N/ha	YIELD t/ha
20	340	4,0
30	370	4,5
45	400	5,0
60	430	5,5



SOYBEAN cropping: seed rate

SEED RATE

Soybean has the ability to compensate for several factors of yield performance: low plant population with more branches and more pods; conversely in case of high plant density.

Pants population target at harvest is::

1st SOWING: 30-35 plants / sqm – 2nd SOWING: 35-40 plants / sqm

The optimal planting rate based on the variety is:

GOOD BRANCHING and LATE MATURITY: 35-45 seeds / sqm LOW BRANCHING and EARLY MATURITY: 45-55 seeds / sqm





INTER-ROW SPACE

Inter-row sowing of 70-75 cm with corn planters may limit yield, in fact:

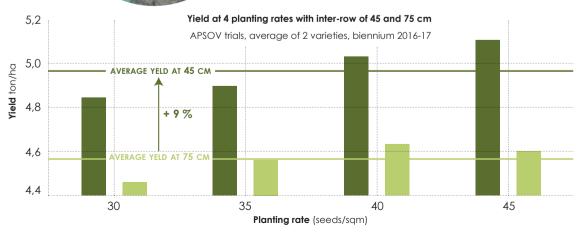
- It limits the full exploitation of light radiation by the crop
- It promotes the weed growth, since it takes several more days for soybean plants to cover the inter-row space.
- It increases the competition among plants along the row.

For these reasons, it is always recommended to avoid sowing at 70-75 cm in the case of late sowing and with varieties with low branching attitude.

Several trials have shown that by using wider inter-row space, yield might decrease by 5 to 15%.

Below are the results of Apsov trial performed for 2 years in a row, showing that the 45 cm inter-row achieved a 9% higher yield (+0.41 ton/ha).

Yield performance is higher only with inter-row space of 45 cm.





Celina



MATURITY GROUP 1+ (1.2)

The highest yield producer of all regardless of conditions

SES	HEIGHT	medium
TURI	POD COLOUR	brown
E	HILUM COLOUR	black
正	BRANCHING	good
	DEFOLIATION	medium
	FIRST POD HEIGHT	high

IES	TKW	medium 160-190 g
^LITI	PROTEIN CONTENT	good
QU,		

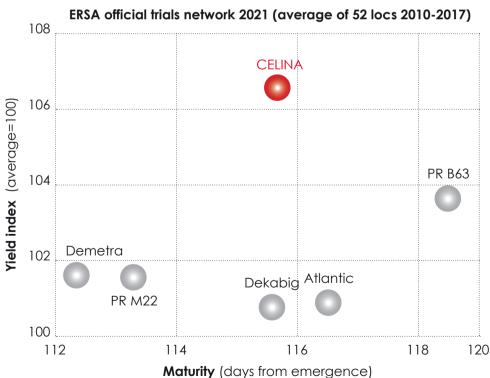
ES	LODGING		MR		
$\frac{9}{2}$	DEHISCENCE			R	
Ι	DROUGHT STRESS		MR		
\sim					

Planting time:

1st crop

Planting rate

40-45 seeds/sqm; 3,2-3,6 units/ha





Benedetta



MATURITY GROUP 1 (1.0)

high

The earliest in maturity group, 1 super yielding

HEIGHT medium

POD COLOUR light brown

HILUM COLOUR black

BRANCHING high

DEFOLIATION medium

FIRST POD HEIGHT

	TKW	medium 160-190 g
^LITI	PROTEIN CONTENT	medium
200		

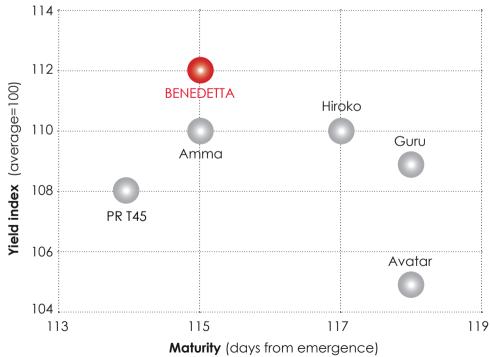
ËS	LODGING		R
$\frac{\circ}{2}$	DEHISCENCE		R
Σ	DROUGHT STRESS		R
\sim			

Planting time:

1st crop / 2nd crop

Planting rate:
40-45 seeds/sqm; 3,2-3,6 units/ha

ERSA official trials network 2021 (average of 8 locs)





Dafne

FIRST POD HEIGHT







MATURITY GROUP 1 (0.9) Super yielding and totally lodging resistant

medium

HEIGHT medium

POD COLOUR light brown

HILUM COLOUR white

BRANCHING good

DEFOLIATION good

ES.	TKW	medium 160-190 g
Ę	PROTEIN CONTENT	good
\leq		

ű	LODGING		R
2	DEHISCENCE		R
_	DROUGHT STRESS		R
2			

Planting time:

1st crop / 2nd crop

Planting rate: 40-45 seeds/sqm; 3,2-3,6 units/ha

APSOV advanced trials network (average of 20 locs 2020-22)





Annette



MATURITY GROUP 1- (0.7)
Perfect balance between yield and earliness

ES	HEIGHT	medium
IUR	POD COLOUR	brown
Έ¥.	HILUM COLOUR	brown
正	BRANCHING	good
	DEFOLIATION	high
	FIRST POD HEIGHT	good

ES	TKW	medium 160-190 g
ALITI	PROTEIN CONTENT	medium
QU,		

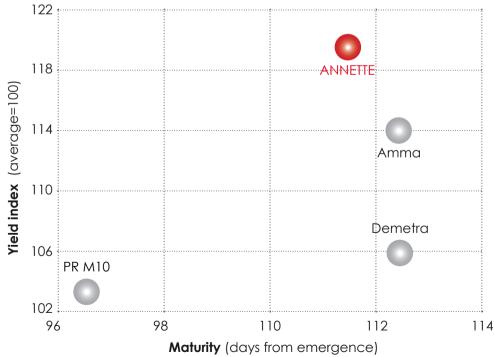
S	LODGING		MR	
$\frac{9}{2}$	DEHISCENCE			R
∠	DROUGHT STRESS			R
\sim				

Planting time:

1st crop / 2nd crop

Planting rate
40-45 seeds/sqm; 3,2-3,6 units/ha

APSOV advanced trials network (average of 19 locs 2017-19)





Carlotta



MATURITY GROUP 1- (0.6) Early, rustic and stable

HEIGHT medium-high
POD COLOUR light brown
HILUM COLOUR brown
BRANCHING medium
DEFOLIATION high
FIRST POD HEIGHT high

ES	TKW	medium 160-190 g
Ę	PROTEIN CONTENT	good
$\stackrel{\triangleleft}{\cap}$		

3	LODGING		R
2	DEHISCENCE		R
2	DROUGHT STRESS		R
2			

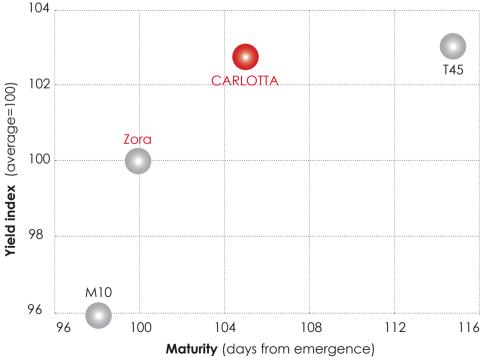
Planting time

1st crop / 2nd crop

Planting rate:

40-45 seeds/sqm; 3,2-3,6 units/ha

APSOV advanced trials network (average of 23 locs 2018-20)





Dorothy





MATURITY GROUP 0+ (0.5) Super high yielding, which never lodges

SES	HEIGHT	low
TURE	POD COLOUR	light brown
E	HILUM COLOUR	brown
正	BRANCHING	high
	DEFOLIATION	high
	FIRST POD HEIGHT	medium

ES	TKW	medium 160-190 g
Ę	PROTEIN CONTENT	good
\cap		

ES	LODGING		R
$\frac{1}{2}$	DEHISCENCE		R
ΤA	DROUGHT STRESS		R
RESIS			

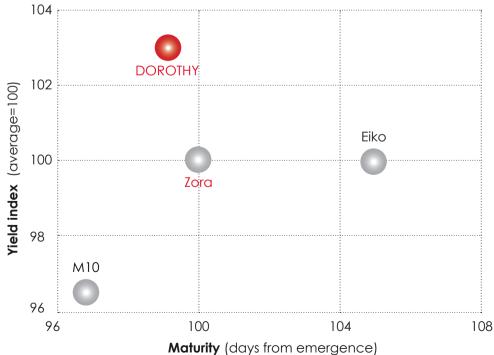
Planting time:

1st crop / 2nd crop

Planting rate: 40-45 seeds/sqm; 3,2-3,6 units/ha

APSOV advanced trials network (average of 27 locs 2019-21)

ō





Eleonora



3





MATURITY GROUP 0+ (0.5)
High protein content, with excellent solubility

HEIGHT medium

POD COLOUR brown

HILUM COLOUR white

BRANCHING good

DEFOLIATION good

high

FIRST POD HEIGHT

	TKW	medium 160-190 g
ij	PROTEIN CONTENT	high
\cap		

ES	LODGING		MR	
$\frac{\circ}{2}$	DEHISCENCE			R
₹	DROUGHT STRESS			R
\sim				

Planting time:

1st crop / 2nd crop

Planting rate:
40-45 seeds/sqm; 3,6-4,0 units/ha

APSOV advanced trials network (average of 27 locs 2020-22)

104

ELEONORA

Eiko

707

PR M10

96

96

100

104

108

Maturity (days from emergence)



Betty

FIRST POD HEIGHT



MATURITY GROUP 0 (0.3)

Very early and totally lodging resistant

good

HEIGHT low
POD COLOUR brown
HILUM COLOUR black
BRANCHING medium
DEFOLIATION high

IES	TKW	high <190 g
Ę	PROTEIN CONTENT	medium
\bigcap		

X.	LODGING		R
$\frac{9}{2}$	DEHISCENCE		R
\leq	DROUGHT STRESS		R
\sim			

Planting time:

1st crop / 2nd crop

Planting rate:

45-50 seeds/sqm; 3,6-4,0 units/ha

APSOV advanced trials network (average of 15 locs period 2018-19)

0



SORGHUM for every purpose

				Possible Best
		Silage	Forage	
GRAIN SORGHUM	Anggy Diamond Ggolden Icebergg Ruby			Moderate height High exertion, that is the distance between the panicle and the last leaf ("combine" trait) Grain with nutritional values similar to corn.
SILAGE SORGHUM	Argensor Argensil Silomix	•		High size, excellent to replace corn silage. Best compromise between biomass production and grain yield.
SORGHUM	Piper Fienomix		•	Multicut, suitable for green forage production and hay.



GREAT VALUE - production cost are
40% lower, compared to corn

SUSTAINABLE - compared to corn demand
is 30% lower in water and 50% in nitrogen

HIGH YIELD - from 5 to 10 tons/ha of grain at

14% moisture from 30 to 80 tons/ha of silage as it is

RUSTIC - root system efficiency and ability to better resist under severe drought stress ensure maximum adaptability

HEALTHY - It does not develop mycotoxin



GRAIN SORGHUM: crop management

SOWING

Planting has to be scheduled with a soil temperature exceeding 12 $^{\circ}$ C at a depth of 2-cm

Ideal seeding rate is 10-15 Kg with single kernel planter and 15-20 Kg/ha with rows planter, which means an average planting rate of 35-45 plants/sqm for grain crop and 40-50 plants/sqm for silage crop.

NUTRITION

A pre-planting application of 100-120 Kg/ha nitrogen for dry soils and 130-150 Kg/ha for deep and irrigated soils is advisable. If needed, additional 80-100 Kg/ha of Phosphorus and Potassium (pre-planting) must be provided. Uptakes for 1 ton grain

WEED CONTROL are: 28 Kg N; 10 Kg P2O5; 33 Kg K2O.

Pre-emergence: Aclonifen, Pendimethalin, Terbuthylazine (broad leaf weeds - grasses)

Early post-emergence: S- S-Metolachlor+ terbuthylazine (grasses + broad leaf weeds)
Post-emergence: Prosulfuron, Bentazone, Mesotrione, 2.4 D, MCPA,
Dicamba,Fluroxipir, Bromoxinil.

IRRIGATION

Water need is of 400-450 mm, the critical phase coincides with the beginning of flowering until the kernels filling. If required, provide 40-80 mm at the end of



Diamond



PURPOSE: GRAIN

Food grade: white kernel and clear huskes

ES	CYCLE	medium
Ę	HEIGHT	medium
EAT	GRAIN COLOUR	pure white
正	PANICLE DENSITY	mid-compact
	HEAD EXERTION	good

Planting time:

Early to mid-early

Planting rate:

35-40 seeds/sqm; 9-11 kg/ha

ES	STOCK RESISTANCE			R
$\frac{1}{2}$	DROUGHT STRESS		MR	
\triangleleft				



Ggolden

PURPOSE: GRAIN

Rustic with high yield potential

EATURES

CYCLE	early
HEIGHT	medium-short
GRAIN COLOUR	white
Panicle Density	mid-loose
HEAD EXERTION	high

DVICES

Planting time: **Early to mid-late**

Planting rate:

40-45 seeds/sqm; 12-14 kg/ha

SISTANCES

STOCK RESISTANCE		R
DROUGHT STRESS		R



Icebergg

PURPOSE: GRAIN

Early, high yielding with super white grain

FEATURE

CYCLE	early
HEIGHT	medium
GRAIN COLOUR	pure white
PANICLE DENSITY	mid-loose
HEAD EXERTION	high

ADVICES

Planting time: **Early to mid-late**

Planting rate:

40-45 seeds/sqm; 12-14 kg/ha

Š	STOCK RESISTANCE		R
$\frac{9}{2}$	DROUGHT STRESS		R
\triangleleft			



Anggy





PURPOSE: GRAIN Yielding and rustic

	CYCLE	medium-early
,	HEIGHT	medium
ì	GRAIN COLOUR	red
•	PANICLE DENSITY	mid-compact
	HEAD EXERTION	high

Planting time: Early to mid-late

Planting rate:

40-45 seeds/sqm; 12-14 kg/ha

STOCK RESISTANCE		R
DROUGHT STRESS		R



Ruby



Leafy plant suitable for wholemeal silage

FEATURES

,	CYCLE	early
,	HEIGHT	medium-short
ì	GRAIN COLOUR	dark red
	PANICLE DENSITY	mid-compact
	HEAD EXERTION	high
	• • • • • • • • • • • • • • • • • • • •	······································



Planting time: Early to mid-early

Planting rate:

35-40 seeds/sqm; 10-11 kg/ha

ES
Š
Ź
ISIS
Щ

Š	STOCK RESISTANCE		R
7	DROUGHT STRESS		R



Piper

PURPOSE: FOR HAY, GREEN FORAGE AND SILAGE

Early type. Resprouts quickly and has high tillering attitude

SES	CYCLE	early
J.	HEIGHT	medium
\leq	CUTTING NUMBER	till 4 cuts
正	LEAFNESS	very good

Planting time:
Early to late
Planting rate:

Cut:

45-55 kg/ha

best when height gets 120 cm

ES	LODGING		R
$\frac{9}{2}$	DROUGHT STRESS		R
Ϋ́			

SILAGE: sorghum vs corn

ARGENSOR and ARGENSIL are tall grain hybrids, suitable for silage with very similar quality to corn silage. By using these two products, the performances of the two species level out in regard to yield levels, dry matter content and starch.

Parameter	Poor soils	High fertility soils	Notes
WATER REQUIREMENT	++	+	Sorghum needs about 400 mm of water, compared to the 600-700 mm of corn, and withstands prolonged drought periods.
COSTS	++	+	Sorghum ensures less need for nitrogen and reduced costs for plant protection.
SILAGE QUALITY	+	-	Equivalent: corn contains more starch while sorghum more sugar and less lignified fiber.
DIABROTICA TOLERANCE	++	+	The sorghum roots are not affected by Diabrotica.
MYCOTOXIN CONTENT	++	+	Sorghum does not contain mycotoxins (aflatoxin), which could affect corn silage crops grown in drought stress.



Silomix



SINGLE CUT MIX

20% SWEET STALK GRAIN SORGHUM, VERY TALL
40% TALL GRAIN SORGHUM
40% TALL GRAIN BMR SORGHUM

FEATURE

CYCLE	medium-early
HEIGHT	high 220-240 cm
LODGING	resistant
REGROWTH	good
Water Need	medium

Υ	DM (%)	26-31
NUTRIONAL DAT	protein (%dm)	7-9
	sugar (%dm)	10-12
	starch (%dm)	18-21
	NDF (%DM)	54-60
	NDF AT 30 H (%DM)	60-65
Z	UFL (n/KG DM)	0,85-0,90

PURPOSE

PRE-DRIED SILAGE	suitable
DIRECT SILAGE	ideal
HAY	not suitable
WRAPPED	not suitable

best harvest stage

\rightarrow	GRAIN FILLING
\longrightarrow	SOFT DOUGH
\rightarrow	HEADING
\rightarrow	HEADING

ADVICES

Planting rate: Single kernel planter 8 kg/ha Cereal planter 12 kg/ha



Fienomix



MULTICUT MIX

OMPOSITION

	30%	SUDAN GRASS
,	30%	HYBRID SORGHUM X SUDAN GRASS
	10%	LIVERID FORDER BAAR CORCUITA
	4070	HYBRID FODDER BMR SORGHUM

FEATURE

CYCLE	medium-early
HEIGHT	high 240-260 cm
LODGING	mid-resistant
REGROWTH	high
WATER NEED	low

ATA	DM (%)	24-28
DA	protein (%dm)	7-9
۸L	sugar (%dm)	14-16
NUTRIONAL	starch (%dm)	4-8
	NDF (%DM)	60-65
	NDF AT 30 H (%DM)	50-55
_	UFL (n/KG DM)	0,75-0,80

PURPOSE

Р	re-dried Silage	ideal
D	irect silage	suitable
Н	ΑY	suitable
٧	/RAPPED	ideal

best harvest stage

\rightarrow	GRAIN FILLING
\rightarrow	SOFT DOUGH
\rightarrow	HEADING
\rightarrow	HEADING

ADVICES

Planting rate: Single kernel planter **30 kg/ha** Cereal planter **40 kg/ha**



Argensor



Purpose: whole plant silage

High sugar content in stover, tall plant and excellent starch producer

SES.	MATURITY	medium-early
Ę	HEIGHT	medium-high
E	CUTS NUMBER	single

Δ	DM (%)	27-32
DATA	protein (%dm)	7-9
_	sugar (%dm)	10-12
Ž	starch (%dm)	20-22
\cong	ndf (%dm)	54-60
UUTRITIONAL	NDF AT 30 H (%DM)	57-60
\mathbb{R}	UFL (n/KG DM)	0,85-0,90

ES	LODGING		R
$\frac{\circ}{2}$	DROUGHT STRESS		R
STA			

Planting time:
Early to mid-late
Planting rate:

25-30 seeds/sqm; 7-10 kg/ha

Argensil



PURPOSE: WHOLE PLANT SILAGE

High sugar content in stover, which grows to a considerable height

SES	MATURITY	medium
15	HEIGHT	high (220-260 cm)
E.	CUTS NUMBER	single

\leq	DM (%)	25-30
DAT	protein (%dm)	7-9
7	sugar (%dm)	11-13
NAL	starch (%dm)	16-18
AUTRITIO	NDF (%DM)	54-60
	NDF AT 30 H (%DM)	60-65
$\frac{1}{2}$	UFL (n/KG DM)	0,85-0,90

ES	LODGING		MR	
$\frac{9}{2}$	DROUGHT STRESS			R
\leq				

Planting time: Early to mid-early

Planting rate: 20-25 seeds/sqm; 6-9 kg/ha



Iolen







HIGH OLEIC

High yielding, compact plant with high oil content

FEATURES

	CYCLE	medium-early
,	HEIGHT	medium-low
ì	head size	high
•	ACHENES WEIGHT	good
	OIL CONTENT	high

DVICES

Planting time: **Early to mid-early**

Planting rate: **5,5-7,5 seeds/sqm**

ESISTANCE

LODGING			R
DOWNY MILDEW			RM9
PHOMOPSIS		MR	
SCLEROTINIA	MS		
PHOMA			T

Inotop



Early, stable and resistant

FEATURE!

CYCLE	early
HEIGHT	medium
head Size	medium
ACHENES WEIGHT	very high
OIL CONTENT	high

ADVICES

Planting time: **Early to mid-late**

Planting rate: 6,0-7,5 seeds/sqm

ES	LODGING			R
$\frac{1}{2}$	DOWNY MILDEW		RM7	
Δ	PHOMOPSIS			T
RESISTAN	SCLEROTINIA	MS		
R	РНОМА			T





Absollute





HIGH OLEIC, IMI

Top yield, none better for resistance to mildew

FEATURES

CYCLE	medium-early
HEIGHT	medium-high
head Size	medium
ACHENES WEIGHT	medium
OIL CONTENT	high

ADVICES

Planting time: **Early to mid-early**

Planting rate:

5,5-7,5 seeds/sqm

ш
()
ž
₹
Η.
\lesssim
Ш
~~

LODGING			R
DOWNY MILDEW			RM9
PHOMOPSIS		MT	
SCLEROTINIA		MR	
PHOMA			T



Duet CL







HIGH OLEIC, IMI

Consistent yield across different conditions

FEATURES

CYCLE	medium-early
HEIGHT	medium
head size	medium
ACHENES WEIGHT	good
OIL CONTENT	high

NDVICES

Planting time: **Early to mid-early**

Planting rate: 6,0-7,5 seeds/sqm

RESISTANCES

3	LODGING			R
)	DOWNY MILDEW		RM7	
2	PHOMOPSIS		MT	
5	SCLEROTINIA		MR	
2	PHOMA	MS		





Nemo



LINOLEIC

Rustic and highly resistant to drought stress

FEATURES

	CYCLE	medium-early
)	HEIGHT	medium
ì	head size	medium
•	ACHENES WEIGHT	medium
	OIL CONTENT	good

NDVICES

Planting time: Early to mid-early

Planting rate: **5,5-7,5 seeds/sqm**

RESISTANCES

LODGING		R
DOWNY MILDEW		RM9
PHOMOPSIS		T
SCLEROTINIA	MS	
PHOMA		T

Nemo CL





LINOLEIC-IMI

High yield potential and highly resistant to drought stress

FEATURES

CYCLE	medium
HEIGHT	medium
head size	medium
ACHENES WEIGHT	medium-high
OIL CONTENT	high

ADVICES

Planting time: **Early to mid-early**

Planting rate: 6,0-7,5 seeds/sqm

RESISTANCES

3	LODGING			R
	DOWNY MILDEW			RM9
	PHOMOPSIS	MS		
5	SCLEROTINIA		MR	
	PHOMA		MT	



BUCKWHEAT: crop management

CROP ROTATION

It precedes or follows cereal crop, it can be used as intercrop (please bear in mind that it is sensitive to sulphonylurea residuals). It is resilient to the weeds, thanks to the covering development and a certain allelopathic action. Nectar-secreting plant, it takes advantage of bees' presence for being pollinated.

SOIL

It thrives in light or gravelly soils. It is not particularly suited to heavy soils with tendency to compact and with many nitrogen residuals. In fertile and deep soils it might have an excessive plant development with consequent lodging problems. It does not succumb to acidity.

TEMP. REQUIREMENTS

Temperature needed for germination is above 10 $^{\circ}$ C. It is very sensitive to frost, temperatures below 4 $^{\circ}$ C lead to sterility.

PLANTING TIME

From mid-May till end of July, depending on water reserves in soil. If planted after cereal crops it shall also act as cover crop.

PLANTING MODE SEEDING RATE FERTILIZATION Shallow planting (1-4 cm), better to avoid compacted soil or water lodging. 180-200 seeds/sqm equivalent to about 35-40 kg/ha, depending on TKW.

It is an undemanding crop, as it does not require nitrogen inputs which might be self-defeating and cause lodging. On extremely marginal land, a pre-planting fertilization with phosphorus and potassium might be considered.



Zirka



Large seeds size and easy to be dehulled

SES	CYCLE	early
Ę	HEIGHT	medium 50-60 cm
\subseteq	FLOWER COLOUR	white
芷	PLANT TYPE	branched

ITIES	TKW	18-20 g
Ę	DEHULLING	high
√ N		

RESISTANCES

ES	LODGING			R
$\frac{1}{2}$	COLD	S		
ΙΨ	FUNGI DESEASES			R
\sim				







FEATURES

HEIGHT	high
CYCLE	medium
GRAIN COLOUR	yellow
GROWTH HABIT	spring

RESISTANCES

LODGING			R
COLD		MR	
DEHISCENCE			R

Galactic

Pedigree unavailable



FEATURES

HEIGHT	medium
CYCLE	early
GRAIN COLOUR	yellow
GROWTH HABIT	spring

ES	HECTOLITRIC WEIGHT	good
	TKW	200-240 g
\bigcap	PROTEIN CONTENT	good
Ø	DESTINATION	food grain

RESISTANCES

3	LODGING			R
2	COLD		MR	
	DEHISCENCE			R

24







FEATURES

3	HEIGHT	high
5	CYCLE	medium
)	GRAIN COLOUR	green
-	GROWTH HABIT	spring

ES	HECTOLITRIC WEIGHT	good
Ę	TKW	200-240 g
\cap	PROTEIN CONTENT	good
Ø	DESTINATION	food grain

RESISTANCES

LODGING			R
COLD		MR	
DEHISCENCE			R

Poseidon

Pedigree unavailable





FEATURES

HEIGHT	high
CYCLE	medium
GRAIN COLOUR	green
GROWTH HABIT	spring

IES	HECTOLITRIC WEIGHT	high
	TKW	230-270 g
V ∩	PROTEIN CONTENT	good
Ø	DESTINATION	food grain

Ų.	LODGING			R
ر ح	COLD		MR	
<u> </u>	DEHISCENCE			R

CHICKPEA: crop management

SOWING

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.

NUTRITION

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.

WEED CONTROL

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.

HARVEST

Pre-emergence: - pendimethalin (ex. Stomp Aqua 1,0–1,75 lt/ha; Inca 1,5 -2,5 l/ha). – pendimethalin + aclonifen (Challenge 2,0 lt/ha).

Post-emergence: pytidate (ex. Lentagran 45 WP 1.2 - 1.8 kg/ha) for the dicotyledons control. It is possible once 14% moisture content is reached, by using preferably axial-flow combine, with beater speed setting of 350-500 rpm, large holed sieves, maximum ventilation.



Alamo



PURPOSE: FOOD

Much appreciated by the food industry

نت	l
\simeq	ŀ
$\overline{}$	l
\vdash	ŀ
_₹	l
#	ŀ
	l

HEIGHT	medium 60-70 cm
PLANT HABIT	mid-erect
CYCLE	medium
FLOWER COLOUR	white
GROWTH HABIT	spring

*average data based on TKW of 420 g

ES	
Š	
Ź	
SIST	
ZES	

3	LODGING			R
)	COLD		MR	
:	DEHISCENCE			R
5	ASCOCHYTA R.		MR	

Planting rate

	O								
	Plant/mq				Row dist	ance cm			
		30	35	40	45	50	60	70	75
/ER	5,5	-	-	-	40,4	36,4	30,3	26,0	24,2
SUNFLOWER	6,0	-	-	-	37,0	33,3	27,8	23,8	22,2
NO.	6,5	-	-	-	34,2	30,8	25,6	22,0	20,5
0,	7,0	-	-	-	31,7	28,6	23,8	20,4	19,0
	20,0	16,7	14,3	12,5	11,1	10,0	8,3	7,1	6,7
	22,5	14,8	12,7	11,1	9,9	8,9	7,4	6,3	5,9
	27,5	12,1	10,4	9,1	8,1	7,3	6,1	5,2	4,8
×	30,0	11,1	9,5	8,3	7,4	6,7	5,6	4,8	4,4
SORGHUM	32,5	10,3	8,8	7,7	6,8	6,2	5,1	4,4	4,1
SOR	35,0	9,5	8,2	7,1	6,3	5,7	4,8	4,1	3,8
	37,5	8,9	7,6	6,7	5,9	5,3	4,4	3,8	3,6
	40,0	8,3	7,1	6,3	5,6	5,0	4,2	3,6	3,3
	42,5	7,8	6,7	5,9	5,2	4,7	3,9	3,4	3,1
	45,0	7,4	6,3	5,6	4,9	4,4	3,7	3,2	3,0
	40,0	8,3	7,1	6,3	5,6	5,0	4,2	3,6	3,3
	42,5	7,8	6,7	5,9	5,2	4,7	3,9	3,4	3,1
Z	45,0	7,4	6,3	5,6	4,9	4,4	3,7	3,2	3,0
SOYBEAN	47,5	7,0	6,0	5,3	4,7	4,2	3,5	3,0	2,8
SOY	50,0	6,7	5,7	5,0	4,4	4,0	3,3	2,9	2,7
	52,5	6,3	5,4	4,8	4,2	3,8	3,2	2,7	2,5
	55,0	6,1	5,2	4,5	4,0	3,6	3,0	2,6	2,4



La Torre

Clones selected from the Vogherese ecotype - [1994]

Production and quality guarantee

FEATURE

PLANT	erect
HEIGHT	medium-tall
stem dimension	medium-thin
BRANCHING	high
BLOOMING	medio-precoce
DOMANCY	dormient
AFTER WINTER REGROW	mid-early

\mathbb{E}	REGROW VELOCITY	very fast
UALITIES	STEM/ LEAVES RATIO	good
$\stackrel{A}{\cap}$	LONGEVITY	high
Q	TOLER, TO TRAMPLING	high
	STRESS TOLERANCE	good
	DESTINATION	hay and silgae,
		dehydrated



Isola

Clones selected from the Vogherese ecotype - \cite{Delta}

High yielding long lasting stand

FEATURE

]	PLANT	erect
5	HEIGHT	high
ì	stem dimension	medium-thin
•	BRANCHING	high
	BLOOMING	early
	DOMANCY	dormient
	AFTER WINTER REGROW	mid-early

QUALITIE

		dehydrated
	DESTINATION	hay and silgae,
	STRESS TOLERANCE	high
5	TOLER. TO TRAMPLING	good
5	LONGEVITY	good
į	STEM/ LEAVES RATIO	high
3	REGROW VELOCITY	fast

Contatti

CEO

Carlo Invernizzi

cell. +39 335 6383145 * c.invernizzi@apsovsementi.it

INTERNATIONAL SALES MANAGER

Cesare Ramponi

cell. +39 344 0871376 * c.ramponi@apsovsementi.it

TECHNICAL SALES AGRONOMIST BALKANS

Stevan Popic

cell: +381 69722235 * s.popic@apsovsementi.it

TECHNICAL SALES AGRONOMIST UKRAINE

Oleg Khekalo

cell: +380 (50) 469 24 35 * o.khekalo@apsovsementi.it

CUSTOMER SERVICE (EUROPE)

Nicolò Cervetti

cell: +39 348 7474242 * n.cervetti@apsovsementi.it

CUSTOMER SERVICE (OTHER COUNTRIES)

Lorena Perini

cell: +39 329 3939568 * l.perini@apsovsementi.it

