

Novaculture

Technical journal on vegetable seeds

N°20

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A NOVELTY IN THE SPOTLIGHT

Okra TOWA F1



**Okra
TOWA F1**

The range of long type okra is regularly growing, as Technisem is always looking for best performances. After the off-season variety KODA F1, this year we want to present you the variety TOWA F1 that produce long green fruits, fleshy and slightly ribbed.

The variety was selected for its high precocity during hot and rainy season, its rusticity, its high yield and for the quality of its fruits.

Available from the second semester of 2021 in 10 G sachets or in 50 G can : don't hesitate to try it!

Maily LAMPARIELLO, Product manager leafy vegetables,
okras, papayas, TECHNISEM France

DIFFERENT IRRIGATION METHODS

Water is an important element for the growth and absorption of minerals. It is also an essential element in the physiological make-up of plants. Water supply (irrigation) is therefore essential for good yields. This issue is more important when it comes to market gardening. Several irrigation methods exist depending on the availability of materials and environmental constraints; in this article we have some irrigation systems.

Flood irrigation

Water submerges the land and infiltrates it completely, unless, after a certain period of time, the flow of the water that has not yet infiltrated is caused.

Irrigation by infiltration

The water does not run off the surface of the soil, it flows in ditches, gullies or furrows and penetrates by lateral infiltration to the roots of the plants. Sometimes, in this case, irrigation and drainage are combined, but only in a very limited number of special cases. Irrigation by infiltration differs from irrigation by submersion because the water is not

discharged into the land and does not cover the surface.

Sprinkler irrigation

Sprinkler irrigation is a watering system that consists of distributing water as rain on the ground through the use of various sprinklers supplied with water under pressure. Here the water falls naturally on the ground, therefore under the same conditions as atmospheric rainfall, and infiltrates it, considering only the permeability of the soil.

Localized or drip irrigation

The water is distributed on the surface of the soil, or in gullies, by numerous «drippers» which each provide a very low flow rate but, each time, for a long period of time, up to almost continuous watering.

Moreover, not the whole soil is moistened, but only a fraction of it: called the hypodermic zone, which corresponds to the area occupied by the roots of the plants.

Cédric TZIEMI
Station Manager IROKO CAMEROON

QUIZZES



@Novaculture

facebook®

QUIZZ

It's easy to play, all you have to do is:

- Like the Facebook page
- Send a private message to the Novaculture Facebook page with: «#Novaculture Games-April2021: give the answer».



Name a yellow hot pepper of the TECHNISEM brand?



Drawing lots among the winners. The winner will be announced on Facebook and in the next Novaculture magazine. There are many prizes to be won!

Winner of the previous issue: Mrs. Fatou BA, Master in Plant Biology, Bambey Senegal. Congratulations to all for your participation!

The question asked was: «Can you name a root vegetable» and the answer was «carrot, radish, beet, turnip».

TECHNISEM LAUNCHES ITS MOBILE APPLICATION

Technisem is very proud to present its new mobile application Android in French/English. A real toolbox, it offers you several possibilities ranging from the choice of varieties, to the location of sales points in the country, including a calculator by species.

Our wish is to be at your side to accompany you to the field. You will thus have in your pocket a support on which to lean.

What tools do you find in the application?

- A customized tool to help you choose a variety.
- Access to a detailed catalog of species and

varieties available in your country.

- The location of the nearest point of sale.
- Advice on the technical itinerary, on diseases and pests you may encounter.
- The possibility to calculate the quantity of seeds you need according to your surface to be cultivated.

You can download it now by scanning this QR code or by going directly to Google Play (only available on Android).

Great discovery!

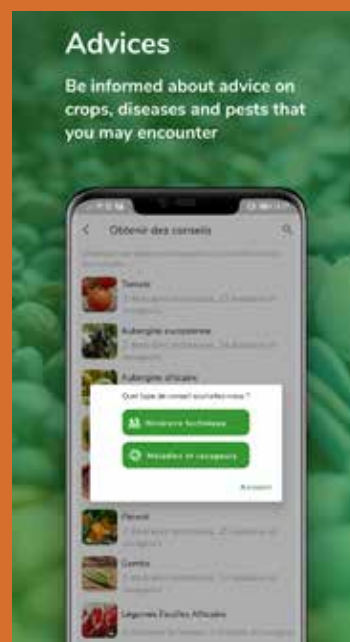
Anne-Laure GRIMAUD, Group COM Manager
TECHNISEM France



QR code



Download it on your Play Store by typing «Technisem».



4 QUESTION OF THE MONTH

What is the grain yield?

For vegetable crops grown on vast fields as carrot, radish, parsley... the grain yield is the seed weight harvested per surface (kg/ha). For instance, the grain yield of our Chinese radish varieties in Europe is 970 kg/ha on average.

For high value vegetable seeds as tomato, peppers, eggplants, watermelon... the grain yield is often expressed in grams per plant as crop surfaces are often less than one hectare and techniques are different between the growth area of the crop. Yield per plant is more relevant and allows us to compare cultivation techniques so as the difference between varieties within the same species.

Grain yield components are:

- How many seeds are harvested per m² or per plant

- The TSW (Thousand Seed Weight)

Number of seeds harvested per m² or per plant is linked with: the number of fruit per m² or per plant, number of seeds per fruit, cultivation methods, environmental condition such as water stress, pathogen and pest attacks, good pollination and fertilization, weed control...

TSW is the weight of 1000 seeds in grams. For instance, 1000 seeds of amaranth weigh 0,47 g

while 1000 seeds of squash weigh on average 130 g. TSW is directly linked with the species and can be reduced if the crop is exposed to a strong water stress.

The TSW can also vary within the same species according to the variety. For example, the watermelon SUGAR DRAGON + has a TSW around 50 g while it is only 29 g for watermelon PINK SWEET.

While producing vegetable seeds, knowing this grain yield is very important as we calculate the surface to grow/number of plants to reach the target quantity based on it.

For example, if the target is 100 kg of seeds, we will not grow the same surface if it is radish SUPER LONGO 2000 or lettuce EDEN.

Grain yield is also a good indicator of how difficult the production of the variety is and thus the final seed cost per kg of this variety.

For example, one will pay much more for seed of the hybrid tomato variety with a yield of 5 g/plant than hybrid tomato with an average yield of 16.5 g/plant.



Lettuce field



Open fruit tomato



Open fruit sweet pepper

Loïc GLATRON, Production area manager
TECHNISEM, France



Testimony

KONATE Soumaïla
producer in Boundiali
North, IVORY COAST

-> How long have you been growing vegetables?

I have been doing this activity since I was very young, when I was about eight years old. It should be said that vegetable production is a legacy that my late father left me. It was his main activity, and whenever I was not at school, I spent all day helping him in the vegetable garden.

-> What species and varieties do you grow?

I grow a lot of cabbage TROPICA CROSS F1, lettuce BLONDE DE PARIS and carrot AMAZONIA. My productions are periodic according to the season and especially the demand of the local market. For a few years, I have been interested in new varieties such as cabbage FORTUNE F1, carrot MADONA, lettuce KEYLLIAN but also cucumber TOKYO F1. I find these varieties quite adapted to my production area.

-> Where do you buy these seeds?

Before, I used to bring the seeds from Korhogo, I bought them with the distributor SEKONGO Mamadou. But since the opening of the SEMIVOIRE store in Korhogo, I buy my seeds directly there.

-> What do you think of the seeds of SEMIVOIRE ?

For me SEMIVOIRE is the best company in terms of seeds. The advantage with them is that we have several varieties for the same species. This means that I can produce throughout the year without any break, since there are varieties for each season, I have never had any problems with a single variety from SEMIVOIRE. I would like to submit a complaint: I ask SEMIVOIRE to accompany us with phytosanitary products and fertilizers, because very often we have good seed varieties but the poor quality of other inputs is sometimes a big problem.

Namongo KONE
Developer North SEMIVOIRE, Ivory Coast

Red spider mite (*Tetranychus urticae*)

Little spider mite which empty the cells content, by biting the underside.



Symptoms and damage

Yellow silver little spots on the upper side of leaves followed by a drying. Spider mite can also be seen in the web weaved around leaves.



Due to some symptoms on fruits, damaged fruits cannot be commercialized.



Damage prevention

- Instal windbreaks around the field.
- Leaves a distance between the crop and the field borders.
- Favour sprinkling irrigation on leaves.
- Weed the field.
- Apply specific and preventive acaricides.

Information from the practical guide created by
TECHNISEM



Recommended varieties for the next three months according to geographical areas*

Below are several varieties provided by TECHNISEM for sowing in three defined areas. These tips are valid for the following months: April, May, June.

The team of product managers TECHNISEM, France and Regional Developers based in Africa



SPECIES	SUDANO-SAHELIAN AREA	COASTAL AFRICA AREA	CENTRAL AFRICA AREA
	Cool dry season	Hot dry season	Rainy season / Cool dry season
TOMATO	KIARA F1	KIARA F1	COBRA 26 F1
	MONA F1	MONA F1	COBRA 34 F1
	COBRA 26 F1	COBRA 26 F1	MONGAL F1
	COBRA 34 F1	COBRA 34 F1	SYMBAL F1
	SYMBAL F1	SYMBAL F1	RODEO 84 F1
	RIO GRANDE +	RIO GRANDE +	
ONION	ARES	ARES	KARIBOU
			ARES
OKRA	BALTO F1	BALTO F1	RAFIKI F1
	KODA F1	KODA F1	BALTO F1
	RAFIKI F1	RAFIKI F1	KODA F1
			FESTIVAL
SWEET PEPPER	CORONADO F1	CORONADO F1	SIMBAD F1, PIZZARO F1
	SIMBAD F1	SIMBAD F1	TIBESTI BW F1
	PIZARRO F1	PIZARRO F1	CARNAVAL (Congo)
	JASON F1, SIEMPRE VERDE F1	JASON F1, SIEMPRE VERDE F1	GOLIATH F1, CORONADO F1
CABBAGE	SULTANA F1, EMIR F1	SULTANA F1	VIZIR F1, FORTUNE F1
	VIZIR F1	VIZIR F1	ROYAL CROSS F1 (RDC, SSF)
	MAJESTY F1	ROYAL CROSS F1	MAJESTY F1 (RDC, SSF)
	CALIF F1	MASTER CROSS F1	RAIN POWER F1, GREEN VELVET F1

*Geographical areas: **Sudano-Sahelian** (Cape Verde, Senegal, Mauritania, Mali, Northern Côte d'Ivoire, Northern Ghana, Northern Togo, Northern Benin, Burkina Faso, Niger, Northern Nigeria, Sudan), **Coastal Africa** (Southern Côte d'Ivoire, Southern Ghana, Southern Benin), **Central Africa** (Congo, Cameroon, Southern Nigeria, Gabon, DRC).

THE MOST OF THE SEASON



Okra
KODA F1

For the CENTRAL AFRICA area

«We propose you to try our favorite variety!»

KODA F1 is an inter season okra, very hardy and ideal for off season. Earliness 50-55 days. Very fleshy fruits and strong rate of mucilage.