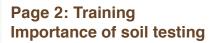


# Novaculture

Technical journal on vegetable seeds

N°26





Page 3: Information and technical tips: Plant associations

Page 4: Question
What are the different parts
of a flower?









Cabbage SENATOR F1

### SOON IN YOUR STORES! SENATOR F1

Despite excellent results in the hot and dry season, many of you have asked for an improvement in the size of Technisem's dry season cabbage varieties.

With SENATOR F1, we offer a variety that meets this demand: a variety adapted to the cool and dry season (with very conclusive first results in Burkina Faso and Ivory Coast) and to the hot dry season (for the moment, there is too little feedback from trials), with a size superior to SULTANA F1 and SANTA F1 and still with excellent firmness and a very good taste.

This variety will be available for a larger sampling campaign from September 2022 onwards and could well position itself as an alternative to the competition of OXYLUS F1 in the cool dry season.

Maily LAMPARIELLO, Product Manager Cabbage and Papaya, TECHNISEM France

#### IMPORTANCE OF SOIL TESTING

Soil plays a major role in agriculture in that it is a support for crops and a reservoir of nutrients that crops need for their development. It is therefore essential to determine the status of the soil by conducting a soil analysis that will allow us to know exactly its texture, its pH, its organic matter content and its nutrient content (N, P, K, Ca...). The determination of the content of the soil enables the optimisation of the agricultural production as it will guide the producers on:

- Which crops are suitable for the soil.

- The types of nutrients and the quantities to be supplemented,
- Nutrients that are not needed.

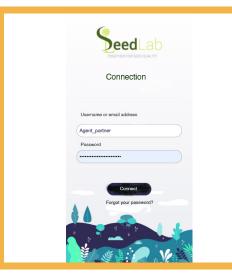
From this, it is clear that regular soil analysis allows to understand the evolution of the chemical fertility of the soil, to adapt the amendments and fertilizers. This results in great savings on the inputs that farmers sometimes make systematically.

> Soumaïla DON, Regional Developer AGRIVISION-BURKINA, Mali

#### **DID YOU KNOW?**

SEEDLAB is currently developing a whole new platform to offer farmers a complete soil analysis service. Stay tuned, it will be launched during 2022!

It consists of a soil analysis kit designed for field use, along with a new web-application in which results are entered. A sheet will be automatically generated with customized



Gregoire ROBERT, Professional Products Coordinator TECHNISEM, France

# QUIZZES

# facebook.

QUIZZ



Name 1 Technisem brand



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

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!

- Like the Facebook page
- Send a private message to the Novaculture Facebook page with: «#Novaculture Games-April 2022: give the answer».

Winner of the previous issue: Mr. Issouf KANTAGBA, Agricultural Entrepreneur, Ouagadougou **Burkina Faso** 

Congratulations to all for your participation!

The question asked was: « Name 2 colors of okra fruit? » and the answer was «green and red».



#### **PLANT ASSOCIATIONS**

The purpose of a plant association is to generate beneficial interactions between crop plants and service plants. A plant association is made on the same plot, either at the same time or in a rotation. Service plants can have many uses:

Cover crops, between two main crops, can smother weeds, protect against erosion, increase the level of organic matter in the soil and thus its fertility (e.g. with green manures), or allow symbiotic nitrogen fixation through pulses (e.g. cowpea, *Dolicus Lalab* or *Lalab Purpureus*).

Sanitizing plants, integrated in the rotation, allow to prevent the appearance of bio-aggressors. For example, used in biodisinfection, they can break the cycles of pests, but also reduce the development of certain diseases, fungi, nematodes... We can mention the carrot/tomato association to break the cycle of the carrot fly, or the pea and tagetes

association (*Tagetes lucida* or *Tagetes minuta*) to prevent nematodes.

The trap plants, placed around the plot, attract the pests, and divert them from the crop. The pests are therefore mainly found on these plants and can be eliminated with a locally applied insecticide. Corn is an example!

These plants can be placed at the edge of the plot, in interculture, or in direct association between the rows of the main crop. Plant associations can also allow:

- A gain of space and a reduction of weeds (the soil cover is greater, and therefore can stop the development of weeds),
- A higher yield if the association is well thought out,
- A spreading out of the harvests in time (association of varieties with more or less long cycles, association of species with different life cycles) ...



Association Gboma + Onion in Benin This association allows the Gboma, planted at the end of the onion crop cycle, to draw and upcycle the remaining nutrients left from the onion fertilization.

## 4 THE QUESTION OF THE MONTH

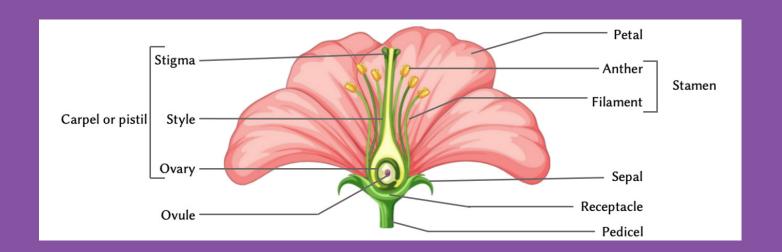
#### What are the different parts of a flower?

A flower is a stem with limited growth that develops modified leaves at its tip that will have a reproductive function. Flowers are composed of several parts, each specialized in one or more functions such as gamete formation, fruit and seed dispersal, pollination or protection.

Generally speaking, the flower can be divided into 2 main parts:

- The parts without reproductive function called the perianth and including the sterile structures such as sepals and the corolla, formed by the petals.

- Parts with reproductive functions:
- \* The androecium, formed by the stamens and the pollen grains which are the male reproductive organs,
- \* The gynoecium, formed by the pistils with their carpels which are the female reproductive organs,
- \* The carpel which is itself divided into style, stigma and ovary, containing the ovules.



Typhaine BRIAND, Assistant Coordinator of Cucurbit breeding programs, TECHNISEM France





#### **Testimony**

Souleymane DIALLO Producer in Gorom, Dakar Senegal

I am a loyal Tropicasem customer and I have been using Technisem seeds for over 20 years.

I have been testing the new Technisem varieties for all species for almost 5 years in collaboration with Tropicasem development agents. I joined the group of pilot producers thanks to Aguibou, with whom I worked in the framework of variety or phytosanitary product trials with the Senegalese Institute of Agricultural Research (ISRA).

The main varieties I buy from Tropicasem are among others: Onion (DAMANI, SAFARI), tomato (MONGAL F1, ANAYA F1, COBRA 26 F1, RODEO 84 F1), cabbage (TROPICA CROSS F1, MARCHE DE COPENHAGUE, SULTANA F1), bell pepper (YOLO WONDER+, SIMBAD F1, ULYSSE F1, NIKITA F1)...

I buy seeds from the stores in Bayakh and Rufisque. I choose Technisem's varieties for the quality of the seeds and their affordability, but we also benefit from the support of its development team when needed. I encourage them to continue on this path to allow us to increase our yield with their varieties that adapt well to our agro climatic conditions.

I also salute the professionalism and the availability of the development and commercial teams of Tropicasem because they facilitate our work with, each time, new performing varieties tested and available in the stores.



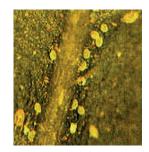
Aguibou DIALLO, Regional Developer AGRIVISION Senegal

#### **Broad mite**

(Polyphagotarsonemus latus)

Small mite, invisible with naked-eye, which sucks the sap by biting the under side of leaves. First symptoms appear on young leaves and on terminal buds.





#### Symptoms and damage

- Dwarfed, batched and bended leaves. Big and sinuous veins
- Stripes on fruits when mites attack flowers before pollination stage.
- Buds fall down, inducing flowers or fruits abortion.







#### **Damage prevention**

- Let a distance between the crop and the field borders.
- · Apply specific and systemic preventive acaricids.
- · Remove crop residues after harvest.
- If necessary, apply a specific, systemic registered miticide.

#### Varietal solutions

African Eggplant : KOTOBI, DJAMBA F1

#### Possible confusions

- Viral attacks
- Damages related to an herbicide

Information from the practical guide created by Technisem

# **CROP GUIDE BY ZONE**



# Recommended varieties for the next two months according to geographical areas\*

Below are several varieties offered 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 WEST AFRICA	CENTRAL AFRICA
	Hot Dry Season (HDS)	Hot Dry Season (HDS)	Rainy Season (RS) Cool Dry Season (CDS)
ТОМАТО	MONA F1	MONA F1	PETOMECH+, NALA F1, RIO GRANDE ( CDS)
	ANAYA F1	ANAYA F1	COBRA 26 F1, COBRA 34 F1 (RS)
	COBRA 34 F1	COBRA 34 F1	ANAYA F1, LINDO F1, MONGAL F1 (RS)
	SYMBAL F1, PETOMECH+	SYMBAL F1, PETOMECH+	NADIRA F1 (RS), BUFFALO (all saison)
	RODEO 84 F1	RODEO 84 F1	TOPAZE F1, AGATE F1, JADE F1
	NALA F1	NALA F1	MONA F1 (CDS), RODEO 84 F1 (CDS)
ONION	ARES	ARES	ARES, NATANGUE
			ROUGE DE TAMA
OKRA	BALTO F1	BALTO F1	KODA F1, FESTIVAL, KOUSKO
	RED PASSION F1	RED PASSION F1	BALTO F1, RAFIKI F1, YODANA F1
	RAFIKI F1, KODA F1	RAFIKI F1, KODA F1	LUCKY 19 F1, KIRIKOU F1, TOWA F1
SWEET PEPPER	SIMBAD F1	SIMBAD F1	NIKITA F1, SIMBAD F1
	CORONADO F1	CORONADO F1	YOLO WONDER+, CARNAVAL
	DE CONTI F1	DE CONTI F1	PIZARRO F1, CORONADO F1
	SIEMPRE VERDE F1	SIEMPRE VERDE F1	JASON F1, DE CONTI F1
	CARNAVAL	CARNAVAL	SIEMPRE VERDE F1
CABBAGE	MASTER F1	MASTER F1	ROYAL CROSS F1 (CDS), VIZIR F1
	SULTANA F1	SULTANA F1	MASTER F1, EMIR F1
	ROYAL CROSS F1	ROYAL CROSS F1	GREEN VELVET F1, SULTANA F1 (DS)
			MAJESTY F1, RED BALL F1 (DS)

\*Geographical areas: Sudano-Sahelian area (Cabo Verde, Senegal, Mauritania, Mali, Northern Côte d'Ivoire, Northern Ghana, Northern Togo, Northern Benin, Burkina Faso, Niger, Northern Nigeria, Sudan), Coastal West Africa Area (Southern Côte d'Ivoire, Southern Ghana, Southern Benin, Togo, Guinea Conakry, Liberia, Sierra Leone, Guinea Bissau), Central Africa area (Congo, Cameroon, Southern Nigeria, Gabon, DRC).

