

TECHNICAL SHEET

Maize variety Bag 97 TZE Composite 3 x 4

Presentation of maize (CMA/AOC, 2005)

The corn, *Zea mays* (L), belongs to the genus *Zea*, family Poaceae, tribe Andropogoneae. It is an annual herbaceous cereal, with generally weak or even null tillering and an abundant fibrous root system. It presents a large morphological diversity according to the varieties. There are several varieties of corn grown for human consumption: sweet corn, pearl corn, dent corn, flourey corn and glass corn, which is also used as fodder. Ordinary immature corn, on the cob, is widely consumed, either boiled or roasted. Flourey corn, on the other hand, has a grain with a soft albumen, which is widely used as food in Mexico, Guatemala and the Andean countries. More recently, other varieties have appeared: oil-rich corn (appreciated in human food because of the presence of antioxidants that make it more stable), waxy corn (high content of amylopectin, used by some food industries or paper mills as a thickener), amyloid corn (high content of amylose, used by the industry as film for food packaging), etc. The whole grain is composed mainly of starch (64-78%, dry basis), proteins (7- 12%), lipids (12%) and fat (12%). 12%, lipids (4-6%), sugars (1.0-3.0%), minerals (1.0-1.5%), fiber (2.0-2.5%), and vitamins (Waston, 1987 cited in SEMASSA et al, 2016).

Life cycle of maize

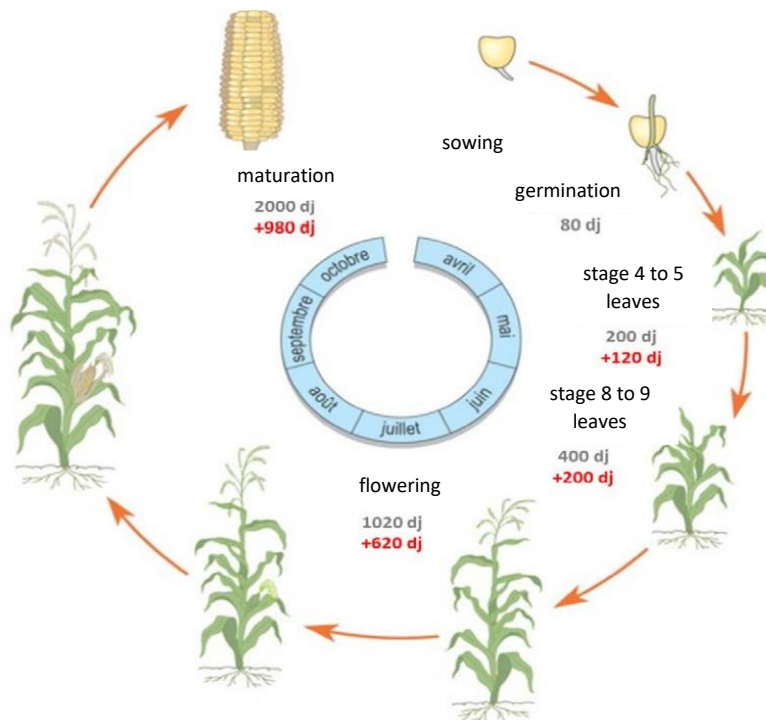


Figure 1 : cycle of maize (source : Bekhtari, 2016)

Seed of maize

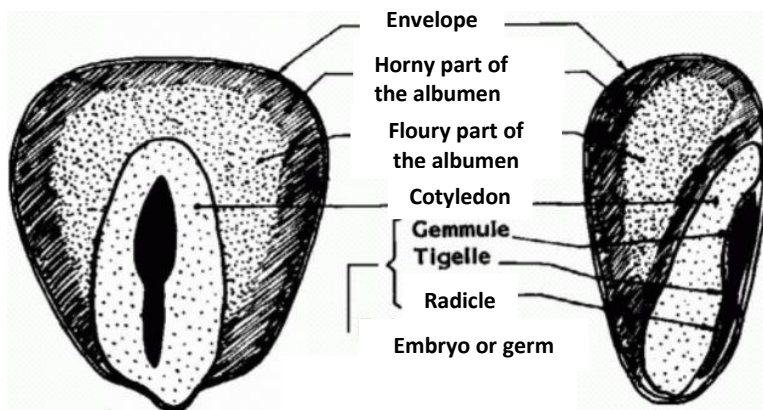


Figure 2 : cutting of a seed (source : TPE PP CORN / POLYSTYRENE

<http://tpepopcorn.eklablog.fr/premiere-partie-le-mais-et-sa-transformation-en-pop-corn-c17605868>, 2012)

Characteristics of the technology

Bag 97 TZE Composite 3 x 4 is an open-pollinated short-cycle variety with white grains developed in Benin in 2008. This variety has grains of glassy texture and horny type.

Phytosanitary characteristics

Resistance to helminthosporiosis: Good

Resistance to stripe: Good

Resistance to rust: Good

Agronomic characteristics

Texture of the grain: Vitreous

Type of grain: Horned

Height of the plant: 160 cm

Number of rows of grains: 14

Number of grains per row: 34

Length of the ear: 15 cm

Height of ear insertion: 75 cm

Sowing-maturity cycle: 90 days

Drought tolerance: Good

Resistance to breakage: Very good

Sowing-flowering cycle: 50-55 days

Ear coverage: Good

Grain color: White

Targets of the technology

This variety can be grown by small and large producers. The grains are used to prepare Owô and Akassa (pasta made from corn), local dishes consumed daily by the Beninese and a large part of West Africans.

Bibliographics references

CMA / AOC (2005) : NOTE TECHNIQUE SUR LA FILIERE MAÏS DANS LA ZONE CMA/AOC ; 16p.

Bekhtari M. C. (2016) : Intégration des Méthodes Multicritères et des Ensembles Flous dans un SIG pour Analyser l'Adaptabilité des Terres Agricoles : Application au Maïs Grain en Languedoc—Roussillon ; Master of Science ; Centre International de Hautes Etudes Agronomiques Méditerranéennes ; Institut Agronomique Méditerranéen de Montpellier ; 65p.

SEMASSA A. J. ; PADONOU S. W. ; ANIHOUVI V. B. ; AKISSOE N. H. ALY D. ; ADJANOHOOUN A. ; BABAMOOUSSA L. (2016) : Diversité Variétale, Qualité Et Utilisation Du Maïs (*Zea Mays*) En Afrique De l'Ouest : Revue Critique ; European Scientific Journal June 2016 edition vol.12, No.18 ISSN: 1857 – 7881 (Print) e - ISSN 1857- 7431 ; 197-217p.

Waston, S.A. (1987) : Structure and composition. In: Corn Chemistry and technology, Watson S.A. and Ramstad P.E. Ed., American Association of cereal Chemists, St Paul, MN, USA, 55-82p.

Web sites consulted

https://www.researchgate.net/publication/304626107_Diversite_Varietale_Qualite_Et_Utilisation_Du_Mais_Zea_Mays_En_Afrique_De_l'Ouest_Revue_Critique ; 05/10/2021 at 10h35

http://www.hubrural.org/IMG/pdf/cmaaoc_mais.pdf ; 05/10/2021 at 10h41

<http://tpepopcorn.eklablog.fr/premiere-partie-le-mais-et-sa-transformation-en-pop-corn-c17605868> ; 05/10/2021 at 10h55

[\(PDF\) Intégration des Méthodes Multicritères et des Ensembles Flous dans un SIG pour Analyser l'Adaptabilité des Terres Agricoles : Application au Maïs Grain en Languedoc—Roussillon \(researchgate.net\)](#) ; 05/10/2021 at 11h45

Other references

Regional Center of Specialization on Maize ; HEADQUARTERS INSTITUTION: CENTRE NATIONAL DE RECHERCHE AGRONOMIQUE (INRAB); NSC MEMBER INSTITUTIONS: At present, the Maize NSC is led by CRA Sud, CRA Centre, CRA Nord, CRA Agonkanmey, FSA/UAC, FAST/UAC, REDAD, OPA (Producers and Processors), DICAFA, IITA. Host country: Benin; Coordinator: Dr. Marcellin ALLAGBE; Email: allamarcel@hotmail.com; Telephone: +229 95 40 62 38 / +229 67 15 26 25