

TECHNICAL SHEET

ATTESTA dryer

Présentation of ATTESTA dryer (PAFASP, 2017)

Most of the mango drying units are equipped with ATESTA (Atelier d'Énergie Solaire et de Technologie Appropriée) or "Natural Convection Gas Dryer" developed by CEAS (Centre Écologique Albert Schweitzer).

The dryer is composed of 4 parts:

- A masonry footing of dimensions 1.8 m x 1.8 m x 0.7 m ;
- A box of two concomitant cells in which ten trays each of drying (of dimensions 0,7 m x 1,2 m, that is to say 0,84 m²);
- A hood that connects the box to the chimney. It channels the hot and humid air to the chimney and supports the latter;
- A chimney, which is the highest part of the dryer. It allows the evacuation of the humid air while avoiding the rain water and the winds loaded with dust to penetrate in the dryer.

Advantages of ATTESTA dryer (PAFASP, 2017)

The advantages of the ATESTA dryer are multiple, with some points of attention:

Advantages: ease of realization, use of local materials and gas as energy, price and reduced maintenance, ease of operation, reduction of drying time compared to sun drying and improvement of quality, versatility (drying of other products), drying in "confined" enclosure, made of local materials with therefore an affordable price, little maintenance is to be brought along its life span (about 10 years)

Points of attention: heterogeneity of drying between the racks, heterogeneity of drying in time, difficult control of the interior temperature, difficult control of the arrangement of the racks and the baffles which can pose safety problems, wood particles can be observed in the dried products.

Characteristics of the technology

20 Kg of dried mango in 24 hours

Bibliographic references

PAFASP (2017) : GUIDE DE LA TRANSFORMATION DE LA MANGUE PAR LE SÉCHAGE AU BURKINA FASO ; Projet d'appui à la commercialisation de mangue séchée et de noix de cajou transformée ; 54p.

Web sites consulted

[SNV CIR Guide Transformation mangue sechee 01.pdf \(cir-burkina.org\)](#) ; 04/03/2022 à 09h50

Other references

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