

## TECHNICAL SHEET

### **Pic bag, a technology serving rural world for healthy and security conservation of cowpea and best valorization of agricultural production**

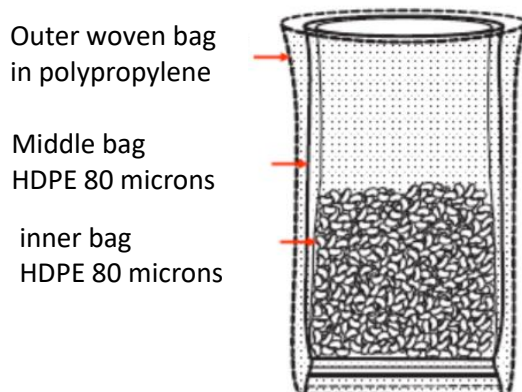
#### **« Sac pics » technology**

The synthetic fabric "peak bag", lined on the inside with two plastic bags (triple bottom), ensures that cowpea can be stored over a long period of time without the use of chemicals (RECA, 2012). The triple-bottom technology results from the fact that once the bags containing the cowpea are hermetically sealed and encased in each other, any air entry is impossible, resulting in the death of the insects inside and the cessation of the reproduction cycle (RECA, 2012).

The conservation technique developed is that of triple bagging (Folefack et al, 2013). As the name suggests, it consists of two polyethylene bags, each 80 microns thick and a third (outer) bag - a woven polypropylene bag (Folefack et al, 2013). The mechanism developed here is that of completely preventing air from entering the bags, thus larvae deposited on cowpea grains in the field will not be able to develop and most eventually die (Folefack et al, 2013).

Until now, researchers explained that cowpea bruchid cannot live without breathing air, which is why storing cowpea in airless environments is an effective method of controlling this insect (this is the principle of storing cowpea in ashes) (RECA, 2012). But according to results recently published by Nigerian and American researchers, the bruchid dies less from suffocation, than from lack of water (RECA, 2012). Therefore researchers insist that cowpeas be as dry as possible during harvest (RECA, 2012). Done correctly, the results brought by this technology are a total elimination of bruchid losses (RECA, 2012).

#### **Components of the "pics bag"**



**Figure 1:** "bag pics" containing cowpeas (source: RECA, 2012)

## Characteristics of the technology

- Best investment for producer extended conservation duration for sale at best price
- Another advantage of pic bags : possible reuse during at least 3 years
- So that the technology of triple bagging can have significant economy effect across the country

## Bibliographic references

Folefack D.P., Sobda A.G., Tengomo S., Boukar O., Tahirou A. (2013) : Vulgarisation de la méthode du triple ensachage pour le stockage amélioré du niébé en zone sahélienne du Nord Cameroun : Enjeux et perceptions paysannes ; TROPICULTURA, 2013 ; 170-178p.

RECA (2012) : Le triple ensachage pour la conservation du niébé - Un point de situation ; Note d'information / Technologies et techniques n°2 ; 7p.

## Web sites consulted

[http://www.laboress-afrique.org/ressources/assets/docP/Document\\_N0370.pdf](http://www.laboress-afrique.org/ressources/assets/docP/Document_N0370.pdf) ;  
08/09/2021 at 09h31

[https://www.researchgate.net/publication/259705512\\_Vulgarisation\\_de\\_la\\_methode\\_du\\_triple\\_ensachage\\_pour\\_le\\_stockage\\_ameliore\\_du\\_niebe\\_en\\_zone\\_sahelienne\\_du\\_Nord\\_Cameroun\\_Enjeux\\_et\\_perceptions\\_paysannes](https://www.researchgate.net/publication/259705512_Vulgarisation_de_la_methode_du_triple_ensachage_pour_le_stockage_ameliore_du_niebe_en_zone_sahelienne_du_Nord_Cameroun_Enjeux_et_perceptions_paysannes) ; 08/09/2021 at 09h31

## Other references

Regional Center of Excellency on Dry Cerals and Associated Crops ; HOST INSTITUTION: CENTRE D'ETUDES RÉGIONAL POUR L'AMÉLIORATION DE L'ADAPTATION À LA SECHERESSE (CERAAS) ; Host country: Senegal; Coordinator: Ndjido KANE; Email: ndjido.Kane@isra.sn; [ndjido.Kane@isra.sn](mailto:ndjido.Kane@isra.sn); Telephone: +221 777232019 / +221 339514693