

Improved Storage of Onion Seeds and Bambara Beans – Prevention of Pests and Damages

Innovations by John Akugre and Nmaa Nso

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Storage of Bambara Beans by means of Shea tree bark by Nmaa Nso

This innovation reduces damages to Bambara beans during storage and assures high germination percentages. If consumed, the taste is maintained when the beans are cooked.

The costs for its application are small. They consist of labour time for obtaining the material and fuelwood to heat water. The innovation is safe to use and no protective clothes are needed.



High quality Bambara beans

How does it work?

First, the bark of the Shea tree is scraped off with a cut glass, knife or axe. The practice is environmentally sustainable as long as only the top part of the bark scraped off. The bark is put into a pot of hot water for a short while. Then, the Bambara beans are poured into the hot water and the hot water is drained immediately afterwards.

Now, the beans are dried in the sun and finally stored in any suitable container. This can be a pot or sack. It is important to store them in a cool and dry place. The beans look good and are viable for up to six months.

The innovators



John Akugre (64) is a very engaged farmer from Tilli, Ghana. His innovation addresses the problems of insect pests during storage and is already adopted already by more than 200 farmers.



Nmaa Nso (36) is a farmer from the region Anazobise in Ghana. As a participant of the *Root and Tuber Improvement and Marketing Programme (RTIMP)*, she is a very engaged farmer. Her innovation for the improved storage of Bambara beans was developed in 2008. Four people have already adopted her innovation.

The use of Barakuk herb to store onion seeds by John Akugre

This innovation prevents attacks from insect pests on onion seeds during storage and improves germination. The germination percentage can increase to up to 90 %. Compared to the traditional and rather common practice of using the Barakuk herb in its dried state, this innovation uses its ashes and improves thereby the impact and effectiveness. The cost for material and labour only consists of collecting, buying or cultivating the Barakuk plant. Processing is quick and easy.

How does it work?

After collecting the Barakuk herb, it is dried, charred and pounded. The ashes are then mixed with onion seeds and stored in an air tight container. As the Barakuk herb only grows in certain areas, it is recommended to cultivate it independently. Cultivation has been tried out successfully.



The Barakuk plant in its fresh state



Foto left: Onion seeds mixed with Barakuk ashes



Foto right: John Akugre has also prepared an ointment from the Barakuk plant and has applied it successfully to animal wounds

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