

The innovators



Abdul Ramani Abbieli (35) is a passionate farmer from Pusiga in Upper East Ghana. Since 2001, he successfully controls Striga on his farm using the described innovation. So far, 50 people have adopted the practice.



Bukari Hassam (47) from Garu-Tempene developed a technique that protects young tree seedlings from termite attack in 2003. The effectiveness of his method also convinced other farmers who now apply it with astonishing results.

Striga Control in Millet/Sorghum by Abdul Ramani Abbieli

Striga weed is a serious pest plant that destroys crops in large parts of Africa. With this innovation Striga can be controlled and yields can be increased. A few years ago, Mr. Abbieli (who is also an onion farmer) found that parts of his sorghum fields were free of Striga. He realized that those parts corresponded to the areas where he had dumped onion leaves, a harvest residue. He applied smaller quantities to the remaining field - with the same result. And later discovered that even mixing the dried onion leave powder into the sorghum seed would have the same effect.

As an onion farmer, the innovation does not involve direct expenses, only a little bit of time for processing.

How does it work?

After harvest, the onion leaves are made into small ball (also buyable in the market). The ball is then dried and grounded and the seeds of millet or sorghum are mixed with the powder. Some amount of water is sprinkled on to help the powder stick to the seeds. Per acre, half a ball of onion leaves is enough. This prevents the germination of Striga on the field.

Foto below: Striga,



Foto above: The onion ball from fresh onion leaves

Biological Control of Termites - by Bukari Hassam

When tree seedlings are planted, they are easily attacked by termites. This innovation has a twofold positive impact. Firstly, it prevents the destruction of roots by termites in young tree seedlings and secondly, it improves the soil



Termites, attacking a older tree

structure surrounding the trees. The idea of the innovation is the luring of tiger ants feed on termites and, through their burrowing activities, loosen and thereby improve the soil structure.

Trees on Mr. Bukaru's field reduce temperatures and provide other products



Mr. Bukari being awarded for his achievements on farmer's day 2013

About 70% of the seedlings survived when the innovation was applied, significantly more than without termite control.

How does it work?

In order to attract the tiger ants (luring), bones are used and placed around the roots of the plants. As tiger ants are carnivores by nature, they will feed on the bones and, more importantly, on the termites, preventing them from damaging the roots of the young tree seedlings.