



How to inoculate soybean: using Biofix



1

Measure 15 kg of legume seed, this will be approximately 15 litres. Place in any container that will accommodate the seeds.



2

Measure one soda bottle (300 ml) of clean lukewarm water.

Pour the water into a larger bottle (500 ml plastic bottle) so that it is easier to mix the gum arabic.



3

Add the 30 g of gum arabic contained in the Biofix pack (the whitish material in a small packet) or 2 tablespoons of sugar to the water.

Mix thoroughly to get an even solution of gum arabic (or sugar). This solution is called the sticker.



4

Add the sticker to the seed.



5

Mix the seed with sticker solution until all the seeds are evenly coated with the sticker.



6

Add the rhizobium inoculant onto the seeds and sticker. The inoculant is the 100 g (10 tablespoons) black powder contained in the Biofix pack.



7

Mix the seeds and the inoculant thoroughly but gently until all seeds are uniformly covered with the inoculant.



8

Protect the inoculated seed from direct sunlight by covering the container with paper, cloth or gunny bag and keep in the shade until planted.

BENEFITS OF INOCULATION:

- Inoculation ensures good nodulation.
- With good nodulation, the legume can fix its own nitrogen.
- When more nitrogen is fixed, legume yields increase. Following crops or crops intercropped with the legume also benefit from the fixed nitrogen.
- Inoculants are much cheaper than nitrogen fertilizers.

Important:

- 100 g of inoculant is enough for 15 kg seed. For smaller amounts of seed, use 4 teaspoons or soda bottle-tops (20 ml) of the sticker solution, and 2 heaped teaspoons or soda bottle-tops (10 g) of inoculant for every 1 kg of seed.
- The right inoculant must be used with the right legume. You should not apply, for instance, a bean inoculant on soybean seed.
- Inoculant contains living organisms that must be protected from heat and sun. Therefore always store the package in a cool place away from direct sunlight (for example, in a clay pot in the coolest place in the house).
- Inoculants lose their effectiveness when stored in an open package. Always store inoculants in their original package and use them quickly after opening the bag.
- Seeds should be coated with inoculant just before planting.
- Do not use inoculant after its sell-by date, as the inoculant may then not be effective anymore.

Working in partnership to create down-to-earth messages on integrated soil fertility management