

Trial EcoVigor: trial in ginger

Product: EcoVigor
Crop: Ginger

Trial setting: Field
Location: India

Objective

Increase production

Methods

Two 3 hectare plots were used for the trial. Traditional culture methods based on organic and chemical pesticides were used in the control plot. Completely organic methods including the use of EcoVigor and EcoNutrient were used in the treated plot. Rhizomes used as seeds were cut into pieces 2.5 to 5 cm in length with one or two buds.

Control Plot: Control of rhizome rot was carried out by dipping the seed rhizomes in 0.3% Dithane M-45 for 30 minutes. The rhizomes were drained and treated for bacterial wilt by dipping in a solution containing 200 ppm Streptocycline for 30 minutes and shade dried before planting. Treated rhizomes were planted at a spacing of 20-25 cm along rows and 20-25 cm between rows. After planting, the beds were drenched with Dithane M-45 (0.3%) and 0.2% copper oxychloride for further control of rhizome rot and bacterial wilt, respectively.

Treated plot: Rhizome seeds were dipped in a solution of EcoVigor (1%) for 30 minutes. Eight liters of EcoVigor and two kilograms of EcoNutrient were applied per hectare. The products were applied in four applications of 2 liters of EcoVigor and 500 grams of EcoNutrient at planting, emergence, three months after planting, and six months after planting.

Both treatments received the same following amendments: Prior to planting, 25 tons of well decomposed dried cattle manure along with 25 bags of bone meal (7:10:5) were applied per hectare. Neem cake was added at 2 tons per hectare at the time of planting to help reduce the incidence of rhizome rot. Two months after planting, 5 bags per hectare of Diammonium Phosphate (DAP) and 2.5 bags of urea were applied per hectare.

After 8 months the ginger was harvested. The rhizomes were separated from the dried up leaves and roots, washed twice in water and sun dried for a day. Total weight of fresh ginger was determined under both treatments. Fresh ginger was kept in water overnight. The rhizomes were cleaned and the outer skin removed. The peeled rhizomes were washed again and sun dried for a week. Total weight of dry ginger was determined under both treatments.

Results

Parameter	Control	EcoVigor
Fresh ginger (tons/ha)	20.5	26.7
Dry ginger (tons/ha)	4.3	5.6
% improvement in dry ginger production		30.2

Rhizome rot was prevalent in the region during the growth trial. The control plot was severely affected by the disease, whereas there was no evidence of the disease in the treated plot. This effect led to an improvement in dry ginger yield of 30.2% over the control plot.