



Bananapack, a package from Juanco SPS Ltd

Banana production in the Great Lakes Region is central to many livelihoods. It is the staple food and contributes greatly to national economies. It is consumed for its high nutritive and therapeutic values being a rich source of vitamins, minerals and more than half of the daily calorie intake. However, with numerous pests and diseases that are affecting banana production, Juanco SPS Limited has come up with a new innovation called Bananapack.

The pack has three components; Fosphite a fungicide to control Fusarium wilt, Marshal EC, an insecticide to control nematodes, banana weevil, termites grubs roots aphids and other soil pests and Humax, soil fertility additive which has 4 times the content of humic acid 12% as compared to normal manure which releases 3% of Humic acid after 6 months.

According to Juanco SPS limited, Fusarium wilt popularly known as Panama disease is a lethal fungal disease. It is caused by the soil-borne fungus *Fusarium oxysporum* spp cubense. "The fungus enters the plant through the damaged roots and colonizes the vesicular bundles thereby blocking the flow of water and nutrients. The disease progression results in yellowing of the leaves, collapse of leaves at the petiole, the splitting of the pseudo stem base and eventually plant death.

Another disease that is mistaken with Fusarium is an airborne fungal disease called Sigatoka that affect the leaves which appears as brown yellowish spot lesions or streaks and at advanced stage the leaves appear

as burned and it normally comes after the rain or when there is high humidity. It is advised that when these symptoms appear pruning of the affected leaves and spraying the remaining leaves and other unaffected plants with a fungicide FOSPHITE every 2 weeks when it is raining helps to heal and prevent further infection" Mr. John Mwendia of Juanco SPS limited narrates.

Application of Bananapack synergistically has controlled the problem of growing bananas in infested soils and demonstrations done in Kirinyaga, Meru and Kisii have proven successful with good yield results and showing signs of the crop remaining in the field for not less than 10 years as opposed to current economic period of 3-5 years.

Banana production has a huge potential in Kenya if challenges facing the crop are addressed. The main gaps and constraints in banana productions are poor agronomic practices pest and disease management soil fertility management and post harvest management. Proper management within banana productions value chain increases the yields from 4-10MT /ha to 35-45MT/ha. According to Mr. Mwendia, "The production of Banana back in 1996 was 43000 hectare. In 2006, it shot to 86000 hectares while this year it is at 115000 ha. This have been attributed to the continuous use of tissue culture bananas, profitable venture of banana productions and the realization of the multiple use of bananas."

Apart from being a staple food it has a numerous number of uses.

Its leaves are used in packaging a host of farm produce such as Khat (Miraa). In addition, the produce is used in making Banana juice, wine, jam and preparation of livestock feed. Its high content of potassium makes it high in therapeutic value particularly to those suffering from stress and diabetics thus "A banana a day will keep a doctor away."

JUANCO SPS and other banana stakeholders are looking into ways of saving the crop from a host of pests and diseases. For instance, KALRO has initiated a process of studying Meru and Kisii banana growing regions and challenges faced by farmers in these areas in order to train them on how best to handle bananas to fight pests and diseases and maximize yield. The training focuses in agronomy, crop protection, post harvest handling, value addition, group dynamics, record keeping and marketing. Other constraints hindering better production of bananas in Kenya include deprived agronomical practices, pitiable soil fertility, poor crop husbandry and lack of clean planting materials, high post harvest losses and inadequate value addition. A value addition on proper agronomic practices and pest and disease control using BANANAPACK will establish a banana seedling successfully a cost of another Ksh 100 which will produce flower within 7 months and a fruit within 8-9 months.

To sum up, agronomists are recommending that the best way to tackle banana pests and diseases is by treating all the possible banana diseases when planting in order to avert future attacks.