INTEGRATED PEST MANAGEMENT (IPM) OF SOYBEAN

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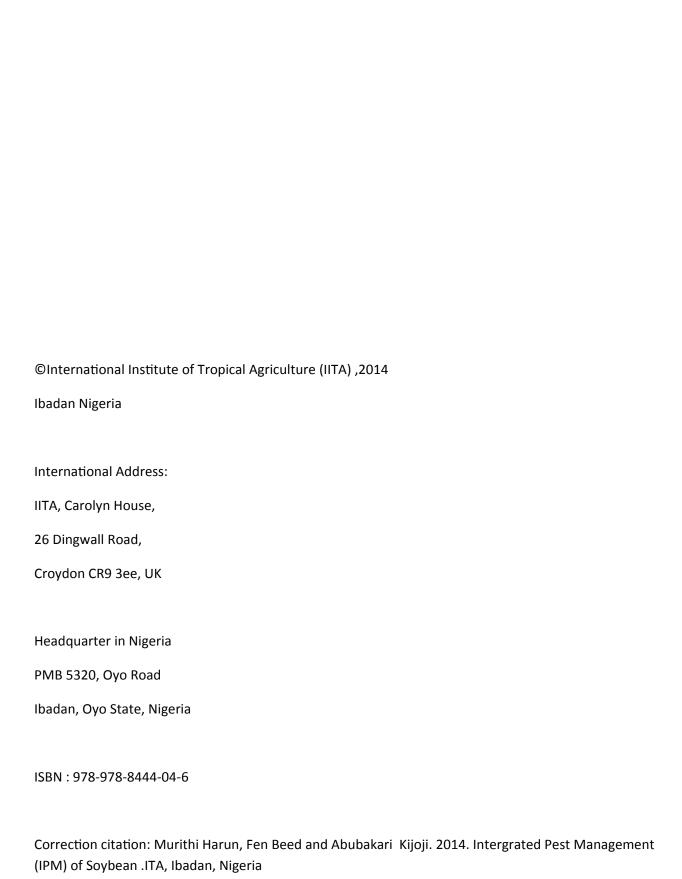


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Preface

Soybean production in Tanzania has increased over the recent past driven by an increased demand for soymilk, soyflour, and soyoil for human consumption and soybean—for the feed industry, mainly poultry. Soybean is grown from 200-2000 meters above sea level. In Tanzania the crop is mainly grown in Southern highlands: Mbeya, Iringa, Rukwa, Ruvuma and in Morogoro in Eastern zone, Arusha and Kilimanjaro regions in Northern zone. Soybean is an important legume grown for its high protein (about 40%) and oil (about 20%) content. It plays a major role at household level as a source of income and in reducing malnutrition. It's mainly cultivated by small-scale—farmers although interest in soybean production has increased among large-scale producers. An increase in the area under production is expected to increase the incidence and severity of soybean diseases and insect pests. Early and accurate diagnosis of diseases and pests is vital for better management decisions.

This manual has been put together through the support of the Catholic Relief Services (CRS) "Soya ni Pesa" Project as a tool to help researchers, extension officers, and growers know the major soybean diseases, insect pests, and symptoms/signs, and the available management options to enhance their diagnostic skills. This knowledge is expected to help growers easily identify diseases and pests and help in the choice of management measures. This is expected to improve disease and pest management and lead to increased soybean productivity through attaining better yields thereby contributing to household incomes.

IITA

The International Institute of Tropical Agriculture (IITA) is one of the world's leading research partners in finding solutions to hunger, malnutrition, and poverty. IITA is engaged in research for agriculture development in Africa and aims to lift 11 million people out of poverty and turn 7.5 million ha of land into sustainable use. This is achieved through the combined synergistic effects of increasing crop yields, enhancing system productivity resilience, decreasing losses due to pests and diseases, improving postharvest management including food safety, and promoting competitive agroenterprises. IITA works with partners to develop and disseminate technologies that suit the farmers. The major focus crops are soybean cowpea, maize, yam, cassava, plantain and bananas.

CRS

Catholic Relief Services (CRS) has been providing assistance to vulnerable communities in Tanzania since 1962. In the agriculture and livelihoods sector, CRS supports many rural communities in fighting disease outbreaks on staple crops such as cassava and banana. CRS in collaboration with International and national research institutions disseminate improved technologies to farmers including quality (improved disease tolerant) planting materials, in particular, cassava and sweetpotato planting materials. In addition to the material input, farmers receive adequate training in pest and disease monitoring and management.

Currently CRS in conjunction with local Tanzanian partner organizations is implementing the "Soya ni Pesa" (Soybean is Money) project, an initiative to strengthen the soybean value chain in Tanzania by working with smallholder farmers and integrating them with markets. The project aims to deliver inputs and training in production techniques, market information and business development to enable farmers to boost yields, add value and increase incomes through soybean cultivation.

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The authors would like to thank Catholic Relief Services (CRS)- Tanzania, for supporting the production of this manual through the "Soya ni Pesa" Project. The manual will help researchers, extension officers and growers to diagnose and better manage soybean diseases and insect pests to improve productivity.

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