VETIVER GRASS: A TOOL IN THE SUSTAINABLE MANAGEMENT OF CROP PESTS.

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Abstract: Crop pests are a threat to food security in many developing countries. Yield losses caused by Lepidopterous stem borers of maize and rice in Africa and Asia range between 10 - 80 %. Development of user-friendly pest management technologies that also has a wider impact on sustainability is essential if we want to improve the livelihoods of farmers in developing countries Vetiver grass technology should be appreciated for its multipurpose potential in the bigger agro-ecosystem and its more specific role as component of integrated pest management systems. Recent research has shown that vetiver grass could play an important role in Integrated Pest Management (IPM) of one of the most important pests of maize. *Chilo partellus*, a stem borer species that originates in Asia causes economic damage to rice, maize, sorghum and pearl millet in Asia and throughout East and Southern Africa. This paper gives an overview of available information regarding nematodes and termites on vetiver and discusses the results of research on vetiver hedges as refuge for potential pests and natural enemies of pests. The possible application that vetiver grass technology may have as a trap cropping system for golden apple snail as well as stem borers in rice, maize and sugar cane is discussed. Detail is provided on laboratory and greenhouse studies on the attractiveness of vetiver to egg laying moths of *C. partellus* and on larval survival. Traps crops may however also have other advantages or disadvantages in an agro-ecosystem. For this reason further studies were done on the effect of vetiver on nematodes (*Meloidogyne* spp.) and on the possible function of vetiver as refugia for other crop pests and natural enemies.