

Integrated Horticultural Management Practices for Controlling Post Harvest Diseases and Pests of Fruits in Bangladesh with Special Emphasis to Organic Production

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Abstract—The paper mainly deals with the scenario of huge amount of post harvest losses of fruits due to insects and pests, ill post-harvest handling and management system. Major problems like pre- and post harvest pest and diseases incidence, ill handling, transportation, storage and marketing system also reflected in the paper. Research and education on post harvest system are inadequate in Bangladesh. Some research were conducted by the Germplasm center of Bangladesh Agricultural University (BAU-GPC) and found some effective measure to control pre- and post-harvest pests and diseases of mango, guava, banana etc organically. Among them, judicious application of organic fertilizers, integrated horticultural managements (pruning, weeding, spading, sanitation measure), use of sex pheromone significantly controlled the fruit fly, fruit weevil of mango; anthracnose and stem end rot of mango during storage. Hot water treatment, resistant varieties, using coating materials also been explored. Scope of future collaborative research and development program in the post harvest quality management system may be explored. Future prospect and practical steps to overcome the huge post harvest losses specially the insects and diseases in Bangladesh are properly addressed.

Keywords: *Post harvest loss, Fruit fly, Anthracnose, Stem end rot, mango, banana, guava.*