

# AESA–Ecologically Sustainable IPM Based Approach

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**Abstract:** *Intensive agricultural practices relying heavily on chemical pesticides, which are a major cause of wide spread ecological imbalances resulting in serious problems of insecticide resistance, pest resurgence, pest replacement and pesticide residues. There is growing awareness world over of the need for promoting environmentally sustainable agricultural practices. Integrated pest management is a globally accepted strategy for promoting sustainable agriculture. There is a conscious shift from the reliance on economic threshold level and chemical pesticides driven approaches in the past to more ecologically sustainable Agro Eco System Analysis based IPM strategies. These focus on pest defender dynamics, innate abilities of plant to compensate for the damages caused by the pests and the influences of abiotic factors on pest buildup. It is an approach which can be gainfully employed by the farmers to analyze field situation with regard to pests, defenders, plant health, influence of climatic factors and their relationship for growing healthy crops. Such a critical analysis of the field situation will help in taking appropriate decision on management practices. One of the basic component of AESA pest and defender population dynamics help the farmer to identification of pests and their nature of damage, identification of natural enemies and to determine number of defender against number of pest according to which farmer decide for management practices.*

**Keywords:** AESA, ecological balance, insecticide resistance, pest resurgence, IPM, healthy crop