

## **Equipping Organic Farming in Medicinal and Aromatic Plants: Central Institute of Medicinal and Aromatic Plants' Scientific Interventions**

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**Abstract :** Consumers and practitioners (medical herbalists, pharmacists, and aromatherapists) with strong and increased awareness about health and environment demand organically grown medicinal and aromatic plants (MAPs) to offer a valued product. As the system does not permit the use of synthetic fertilizers the use of nutrient rich organic manures is extremely important. CSIR-CIMAP has developed a complete recycling package for managing distillation and agro-waste of medicinal and aromatic plants for production of superior quality vermicompost involving microbes capable of producing high amounts of humic acid. The major benefits being faster composting period and nutrient rich vermicompost; a nutrient advantage of about 100-150% over the most commonly used organic manure (FYM). At CSIR-CIMAP, strains of microbial inoculants with multiple activities especially strains useful both as biofertilizers and biofungicide and consortia of microbes possessing diverse functional activities have been developed. CSIR-CIMAP has also initiated a program where a large number of accessions are being screened for identifying organic proficient genotypes in mints, ashwagandha, geranium and safed musli. Some of the natural plant growth promoters like calliterpenones from the plant *Callicarpa macrophylla* has been tested successfully for induction of rooting in stem cuttings and improving growth and yield of various crops. Some of the microbes especially the endophytes have even been identified improving the active constituents of medicinal and aromatic plants. The above said scientific interventions making organic farming a charming proposition would be discussed in details.

**Keywords :** organic agriculture, microbial inoculants, organic fertilizers, natural plant growth promoters

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