ORIGINAL RESEARCH ARTICLE

Introduction of sweet basil (*Ocimum basilicum* L.) as a short-duration annual aromatic crop in Assam for enhancing the income of farmers of the North-East Region

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ABSTRACT

Sweet basil (Ocimum basilicum L.) is widely cultivated by the farmers of North Indian plains after harvesting the menthol mint or maize crop. Large area under cultivation of this annual crop by marginal farmers in North India is pre-dominantly occupied by the variety "CIM-Saumya," developed by CSIR-Central Institute of Medicinal and Aromatic Plants. In the present study, an effort has been made for the first time to introduce CIM-Saumya cultivation as a short-duration crop in three northeastern districts of Assam, namely, Goalpara, Kokrajhar and Dhubri. The work was carried out under the aegis of CSIR-Aroma Mission and World Bank-funded APART (Assam Agribusiness and Rural Transformation Project) in May 2022. The first-year data of a May-September cropping cycle has suggested that CIM-Saumya could adapt and perform very well in all three new habitats of Assam. The crop recorded an average herb yield, i.e., 25–27 ton ha⁻¹, that resulted in the recovery of 100-110 Kg ha⁻¹oil upon hydro-distillation of the whole herb. Based on its excellent chemical fingerprint, the farmers could sell their oil to the buyer companies in the Barabanki district of Uttar Pradesh @ Rs 1400 Kg⁻¹. Thus, per this high market rate of O. basilicum, the Assam farmers could realize a net profit of 1.0-1.03 lakh per hectare within 100-120 days. Details on cultivation practices followed, and the cost economics realized in this study are discussed here.