EFFECT OF INTERCROPPING COWPEA, FRENCH BEAN, TURMERIC AND GINGER WITH COLOCASIA UNDER AGRO-CLIMATIC CONDITIONS OF CHHATTISGARH PLAINS

Umesh Painkra, J. Singh, Karan Sonkar and Vijay Kumar

Department of Horticulture, Indira Gandhi Krishi Vishwavidyalaya, Krishak Nagar, Raipur-492012 (C.G.)
Email-sonkar.karan@gmail.com

Abstract: The experiment was carried out in the field of AICRP on tuber crops, Research and Instructional Farm, Department of Horticulture, College of Agriculture (IGKV), Raipur (C.G.) during Kharif, 2010-11. The experiment was laid out in a randomized block design with nine treatments three replications with an objective to study the effect of intercropping cowpea, french bean, turmeric and ginger with colocasia under agro-climatic conditions of Chhattisgarh plains. The treatment consisted of sole and intercropping viz: T1 - Colocasia (sole) with 60 x45 cm, T2 - Colocasia + Cowpea (1:1) with 60 : 30 cm, T3 - Colocasia + Cowpea (1:2) with 60 : (15 : 15) cm, T4 - Colocasia + French bean (1:1) with 60 : 30 cm, T5 - Colocasia + French bean (1:2) with 60 : (15 : 15) cm, T6 - Colocasia + Turmeric (1:1) with 60 : 30 cm, T7 – Colocasia + Turmeric (1:2) with60 : (15 : 15) cm, T8 – Colocasia + Ginger (1:1) with60 : 30 cm, T9 – Colocasia + Ginger (1:2) with60 : (15 : 15) cm. The name of variety for different crops are: Colocasia – Indira Arvi-1, Cowpea – Pusa komal, French bean – Contender, Turmeric – Rashmi, and Ginger: Suprabha. The result revealed that growth parameters of colocasia viz., plant height, number of leaves and yield attributes like number of cormels plant⁻¹, weight of cormels plant⁻¹ weight of mother corn plant⁻¹, total yield plant⁻¹, total tuber yield and marketable tuber yield t ha⁻¹ were recorded significantly highest under sole cropping of colocasia. Among all intercropping system, plant height and number of cormels plant⁻¹ were observed higher under colocasia + cowpea at the 1:1 row ratio followed by colocasia + french bean at the 1:1 row ratio. Beside that; weight of cormels plant⁻¹, weight of mother corn plant⁻¹, total tuber yield and marketable tuber yield t ha⁻¹ were found higher under colocasia + ginger at the 1:1 row ratio among the other intercropping system.

Keywords: Intercropping, colocasia, cowpea, frenchbean, turmeric, ginger

REFERENCES


