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Influence of Intercropping and Arbuscular Mycorrhizal Fungi (AMF) on Growth and Yield of Cauliflower

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ABSTRACT

In order to meet the growing food needs of a growing global population, increasing crop production is becoming more and more crucial. Therefore, compared to growing solitary crops, intercropping has been regarded to be beneficial for space economy since it makes better use of water, nutrients, and solar energy, all of which can greatly increase crop yield. The objective of this study was to determine the effect of intercropping and Arbuscular mycorrhizal fungi (AMF) on growth and yield parameters of cauliflower during 2024-25 at the Department of Horticulture, School of Agriculture, ITM University, Gwalior. The cauliflower (*Brassica oleracea* L. var. *botrytis*) as a main crop was intercropped with coriander (*Coriandrum sativum* L.), fenugreek (*Trigonella foenumgraecum* L.) and carrot (*Daucus carota* L.) with and without AMF. According to the research, in the case of cauliflower as a sole crop and in an intercropping system, the sole treatment of cauliflower recorded a higher number of leaves, higher stalk length and lower net curd weight whereas treatment Cauliflower (With AMF) + Coriander recorded with the highest for leaf area and treatment Cauliflower (With AMF) + Fenugreek, resulted with highest mean for net curd weight. As a result, the study concluded that cauliflower intercropped with green crops such as coriander and fenugreek is more profitable than cauliflower as a single crop.

Keywords: AMF, cauliflower, intercropping, growth, yield

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