

Effects of Arbuscular Mycorrhizal Fungi (AMF) Inoculation and Organic Fertilizer, Soil Improvement Material Application on the Plant Growth and Fruit Quality of Sugar Apple (*Annona squamosa* L.)

Chi-Chung Chang¹

Abstract

The influence of AMF inoculation and organic fertilizer, soil improvement material application on the plant growth and fruit quality of sugar apple was investigated. The result can be the information for treat as the sugar apple fertilizer management and related measures of appropriate fertilizer utilization. In the study of AMF inoculation and organic fertilizer application on growth of sugar apple plant, the result showed that sugar content (22.4 °Brix) and fruit weight (792g) of sugar apple inoculated with AMF and applied organic fertilizer is the best; In the study of AMF inoculation and soil improvement material application on growth of sugar apple plant, the sugar content (21.6 °Brix) and fruit weight (474g) of Sugar apple applied soil improvement material is the best. According to the result of study, AMF inoculation can cooperate with organic fertilizer, but not with soil improvement material.

Key words: AMF、Organic fertilizer、Soil improvement material、Sugar apple

¹Assistant Researcher of Taitung DARES, COA.