

IMPACT OF SHADE GIVEN BY RUBBER (*Hevea brasiliensis*) ON ANTHURIUM
(*Anthurium andreaanum*) CULTURE

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Rubber being a major plantation crop in Sri Lanka plays a significant role in national economy. In rubber plantations there is a potential to practice intercropping to enhance the productivity of existing lands. An experiment was conducted in Dartonfield estate in Rubber Research Institute of Sri Lanka at Agalawatta with an objective of assessing the impact of shade given by the rubber canopy on the performances of Gauthamala and Tropical red anthurium varieties. Three shade levels were used as standard shade (60-75%) and shades given by the mature rubber canopies of RRIC 121 (80-85%) and RRIC 100 (90%-95%). Leaf area, number of flowers, flower quality parameters and leaf fluorescence were assessed in regular intervals. Anthurium plants have increased the leaf area with the increase in shade levels showing the potential to increase under the rubber canopy. The Gauthamala variety gives the poor flowering performance and Tropical red produced flowers successfully under three shade levels. When compared to the flower qualities of Tropical red variety, no difference was observed in flower size, asymmetric and overlapping percentage flowers and straight petioles character among three shade levels. However the percentage of damaged flowers (17.24%) under RRIC 121 was higher than the standard shade level. Leaf fluorescence indicated that there is no photoinhibition of leaves among three shade levels. Therefore the study confirmed the potential of cultivating of Tropical red variety of anthurium under the shades of RRIC 121 and RRIC 100.

Key words: Intercrop, Standard shade, Fluorescence