

**INFLUENCE OF CORN COB AND HUSK BIOCHAR ON
GROWTH AND YIELD OF MALABAR SPINACH**

(Spinacia oleracea L.)

BY

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ABSTRACT

The field experiment was conducted to study the influence of corn cob and husk biochar on the growth and yield of the Malabar spinach (*Spinacia oleracea* L.) during May to September 2021 at home garden, Welimada, Ambagasdowa in the Badulla district. The experiment was laid out in Randomized Complete Block Design with seven treatments and 6 replications. Treatment were 10 g compost (T1), 10 g compost and 10 g corn cob biochar (T2), 10 g compost and 20 g corn cob biochar (T3), 10 g compost and 30 g corn cob biochar (T4), 10 g compost and 10 g corn husk biochar (T5), 10 g compost and 20 g corn husk biochar (T6), 10 g compost and 30 g corn husk biochar (T7) as basal and after 4 weeks of seeding, 1 g of urea was added per plant according the recommendation of Department of Agriculture, Sri Lanka.

The results revealed that application of compost and 30 g corn husk biochar had significant differences ($P < 0.05$) on plant height, number of leaves, root length, fresh weight of leaves, air dry weight of leaves, air dry weight of roots, fresh weight of whole plant, yield at 6th week after planting (at harvest time). Also, application of compost and 30 g corn cob significant difference ($P < 0.01$) on number of leaves, leaves length on Malabar spinach. Application of different concentration of corn cob and husk biochar increased the growth and yield of Malabar spinach (*Spinacia oleracea* L.). Present study suggests that, among the all tested treatments, 30 g of corn husk and compost would be the best to obtain better growth and higher yield of Malabar spinach.

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