

B55 PRELIMINARY STUDY ON THE EFFECT OF INCORPORATION OF COIR
DUST AND PADDY HUSKS ON C:N RATIO AND
CATION EXCHANGE CAPACITY OF TWO SOILS

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Composite samples of the plough layers of an Alfisol and an Oxisol were mixed with coir dust and paddy husks separately at a rate equivalent to 4 tons per hectare. Samples treated with coir dust and paddy husks and untreated samples were incubated at 25°C maintaining the soil moisture at 60% of the water holding capacity for a period of two months. CEC and contents of organic carbon and organic nitrogen were determined in samples drawn after 1, 2, 3, 4 and 8 weeks of incubation.

C:N ratios of the soils decreased gradually, caused by the simultaneous decrease of organic carbon and increase of organic nitrogen. However, the paddy husks treated soils showed higher C:N ratios than the coir dust treated soils as paddy husks contained more organic carbon and similar contents of nitrogen compared

with coir dust. C:N ratios of coir dust treated soils and paddy husks treated soils reached the initial C:N ratios of the controls in two weeks and three weeks respectively indicating the slower decomposition of paddy husks. C:N ratios between treatments showed significant differences throughout the incubation. However, there was hardly any difference between the two soils,

Coir dust and paddy husks incorporation did not change the CEC of soils significantly. CEC might be governed by other factors during such a short period.