

INCREASING PHOSPHORUS AVAILABILITY OF EPPAWALA APATITE

C. S. Weeraratna

(Faculty of Agriculture, Ruhuna University College, Matara)

Studies conducted on Eppawala apatite indicate that the availability of P in this material to plants is considerably low. The objective of this investigation was to examine some methods of increasing P availability in Eppawela apatite.

SECTION B

Two types of soils, *viz.* reddish brown latasolic and reddish brown earth, were incubated separately under flooded and unflooded conditions with ground apatite and one of the following: straw, cow dung and sulphur. These materials were incorporated at 2%. The available P content, indicated by NaHCO_3 extractable P (Olsen's P) was determined at fortnightly intervals.

Results indicate that incorporating straw or cow dung increases the P availability of Eppawela apatite. With straw, under aerobic conditions, the increase was observed after two weeks of incubation over a period of 8-12 weeks in both soils. With cow dung too the available P increased over controls from the second week to the sixth week. Under anaerobic conditions this effect was observed only in the case of cow dung. Sulphur did not have any significant effect on phosphorus availability.

These investigations were carried out with a grant provided by the National Science Council.