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EVALUATION OF EPPAWALA APATITE BY CHEMICAL ANALYSIS

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Citric acid (2%) is used in many parts of the world for evaluating the suitability of rock phosphates for direct application to crops. A wide range of values (0.1 - 5.2 % P_2O_5) of citric acid soluble phosphorus for Eppawala apatite has been reported by different investigators in Sri Lanka. This has led to the general conclusion that the Eppawala deposit consists of rock material of highly variable citric acid soluble phosphorus content. While this may be correct such divergent values can also result from use of differing analytical procedures.

The effect of varying the ratio of apatite to citric acid used, the time of shaking and the rate of shaking on the amount of phosphorus solubilised have been investigated.

From the same source of Eppawala apatite we have obtained widely different citric acid soluble phosphorus by changing the ratio of apatite to citric acid. Some of the variation in the citric acid soluble phosphorus of Eppawala apatite referred to earlier could have resulted from non adherence to the same analytical procedure by the numerous laboratories. A standardised analytical procedure is essential for the proper evaluation of Eppawala apatite.