

EFFICIENCY OF CHEMICALLY TREATED EPPAWALA PHOSPHATE
AS A SOURCE OF PHOSPHATE FERTILIZER FOR RICE

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An inexpensive chemical conversion by a process of double decomposition is known to convert the insoluble Eppawala phosphate to a soluble form. Hence, it was considered worthwhile to test the efficiency of this chemically converted Eppawala phosphate on the growth and yield of rice in comparison with the expensive, imported phosphorus fertilizer presently used in Sri Lanka. A pot experiment was conducted with a phosphorus deficient soil using a new improved variety of rice, namely, Bg 450 in a randomized complete block design with four replications. A basal application of N and K was added to each pot. The controls received no phosphorus fertilizer, while the treatments received equivalent amounts of phosphate in the form of Eppawala phosphate, chemically treated Eppawala phosphate and triple super phosphate. Estimation of dry matter production and phosphate accumulation were carried out at 6 weeks after planting and at harvest. Yield component analysis were carried out at harvest. The results show that the chemically treated Eppawala phosphate is comparable to triple super phosphate in terms of efficiency.