

## **B-21 Response of vegetable crops to application of liquid organic based soil activator fertilizers**

J D H Wijewardena

(Regional Agricultural Research and Development Centre, Bandarawela)

“LOBSA” and “SUPREME” are commercially available liquid organic based soil activator fertilizers which are supposed to contain rich sources of specific complex substances known to be essential for vigorous biological activity in plant life. This experiment was conducted to evaluate the effect of these products in a cropping sequence in the upcountry intermediate zone.

A long-term field experiment was conducted to study the effect of “LOBSA” and “SUPREME” on vegetable crops, at the Regional Agricultural Research and Development Centre, Bandarawela. LOBSA was added at the rate of 3 and 4.5 l/ha, while SUPREME was added at the rate of 20 and 30 ml/m<sup>2</sup>. In addition LOBSA 3 l/ha + SUPREME 20 ml/m<sup>2</sup> and LOBSA 4.5 l/ha + SUPREME 30 ml/m<sup>2</sup> combinations were also included. They were compared with no fertilizer, recommended chemical fertilizers, 10 t/ha cattle manure + recommended chemical fertilizers and 10 t/ha poultry manure (deep litter) + recommended chemical fertilizers. The experiment was Randomized Complete Block Design with 3 replicates. Pole bean (*var.* KWG) and cabbage (*var.* Hercules) were grown sequentially.

Irrespective of the crops the highest crop yield was obtained with 10 t/ha poultry manure + chemical fertilizers followed by 10 t/ha cattle manure + chemical fertilizers and chemical fertilizers alone. LOBSA and SUPREME and their combinations gave low yields.

These findings demonstrate that application of liquid organic based soil activator fertilizers such as LOBSA and SUPREME may not be suitable for vegetable cultivation in this region emphasising that conventional fertilizer mixtures-

cattle manure + chemical fertilizers or poultry manure + chemical fertilizers are better for increased vegetable yields.