

## Fertilizer use behavior among cinnamon farmers

A P P Disna\* and J K Lindara

*Department of Export Agriculture, Peradeniya*

Cinnamon is important to Sri Lanka in the international spice trade as the country supplies over 80% of true cinnamon requirement of the world market. The export volume and earnings from cinnamon in 2005 exceeded 12,000mt. and Rs. 5000million respectively and cinnamon is grown in about 30,000 ha in Sri Lanka mainly in Southern, Sabaragamuwa and Western provinces. Over 1,00,000 families in these areas involve in the cinnamon industry mainly in farming, processing and trading and earn substantial part of their family income. Fertilizer application and weeding are regular practices in most of the cinnamon cultivations. Although clear technical recommendations have been given on the type, quantity and the method of application of fertilizer it has been reported that these recommendations are not fully adopted by many cinnamon farmers. The objective of this study was to find out the fertilizer use behavior among cinnamon farmers in Sri Lanka. Primary data, gathered from two surveys in cinnamon growing districts, were used for the study. Results revealed that 79% of cinnamon farmers use inorganic fertilizer comparative to other spices such as pepper (29%) and cardamom (28%). Average fertilizer use for cinnamon in the study area was found as 1031 kg/ha while the fertilizer recommendation is 900kg/ha. The highest rate of fertilizer application of 1159kg/ha was reported in Galle district followed by Matara, Kalutara and Colombo with 1092kg/ha, 1032kg/ha and 832kg/ha respectively. Although it was recommended to apply fertilizer twice per year 82% farmers had applied fertilizer only once a year with the maha rains. The recommended fertilizer technology for cinnamon is to make mixtures using bulk fertilizer at the rate of 23: 07:15: 02 of N:P:K:Mg with urea as the N base. The survey in Galle district revealed that only 8% follow the above recommended technology while others use packed fertilizer available in the shops under different trade names. The Baur mixture was the most popular (41%) followed by Lak pohora (11%), Agstar (7%), CIC (7%), Maclean and Laksaru respectively. It was revealed that all mixtures, except CIC mixture, had the recommended nutrient composition. About 4% of farmers had used "cinnamon fertilizer" available at shops without knowing any other details. About 42% farmers, who apply packed fertilizer, used ammonia based mixtures while 16% farmers who used urea also applied ammonia mixtures once in two to three years. Farmers who preferred ammonia fertilizer believe that increased plant growth due to urea application make the bark rough which cause difficulty in peeling if peeling is practiced once a year. They also viewed that urea is better if harvesting is done twice per year but only 7% of them had practised double harvesting. Majority of cinnamon farmers use inorganic fertilizer but the quantity, type and method of application are different from the technical recommendation.

Tel: 081-2388651