Cassava Leaf Production Research in Thailand

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The unlignified upper part of the cassava plant is potentially a good source of protein for animal feed rations because of its high yield and nutritive value. Factors affecting yield and protein content of cassava foliage are presently being researched to determine the most suitable practices for cassava foliage production in different parts of the country.

Experiments on varieties, plant spacing, fertilizer application and cutting height and frequency were conducted in 2001/02 and 2002/03, and are being repeated this year again at Rayong, Nakhon Ratchasima, and Khon Kaen Field Crops Research Centers. The following results were obtained from these trials:

-Most of the recommended varieties for root production such as Rayong 5, Kasetsart 50, Rayong 72 and Rayong 90 produced 11-16 t/ha of dry leaves from 4-5 cuts during a 12 month growth cycle, in addition to 10-35 t/ha of fresh roots.

-The most appropriate plant spacing for leaf production tends to be location specific. At Rayong planting at 30x30 cm gave higher leaf yields than at wider spacings. However, when both leaf and root yields are considered, a spacing of 60x60 cm produced a higher net income.

-For high leaf production, the application of at least 300 kg N, 75-150 kg P_2O_5 and 150 kg K_2O/ha is required.

-Cutting as often as every 1.5-2 months seems suitable when regrowth is rapid during periods of adequate rainfall, while cutting may be delayed for up to 3 months when regrowth is slow during the dry season.

-Cutting height is probably location specific. A low cutting height of 15 cm above the ground produced good leaf and root yields at Rayong, while at Khon Kaen 25 cm was better.

Though we have already obtained good information about cassava leaf production from these trials, it is not yet possible to draw definite conclusions. We need to select those practices that optimize both leaf and root yields and minimize costs in order to increase farmers' net income.