

PERFORMANCE OF PROMISING SWEET POTATO LINE,
CARI-426 DEVELOPED THROUGH POLY-CROSS BREEDING

K.P.U. de Silva, J.C.K. Basnayake,
P.S.A.D. Premathilake and S.D.G. Jayawardena
Central Agricultural Research Institute, Gannoruwa.

A new sweet potato hybrid line, CARI-426 has emerged through polycross breeding from the varietal improvement programme which is aimed to upgrade the yield potential and quality of sweet potato in Sri Lanka. CARI-426 originated as a recombinant of polycross hybrid involving indigenous and exotic genetic stocks and its maternal parent is a native variety Beli-Bathala collected from Rikillagaskada, Hanguranketha.

CARI-426 has a relatively bushy plant type having numerous major branches close to the base. Root tubers have pinkish-orange skin and orange flesh with highly uniform fusiform type of tuber shape. It has medium dry matter content (24.5%) and high vitamin A content, so that it has a relatively wet taste retaining attractive deep orange flesh when cooked. The sweetness of the flesh is moderate and is medium in protein content (3.3% on dry matter basis).

CARI-426 produced 44%, 60% and 25% yield advantages in 3½ months over the commonly grown variety Wariyapola under the National Co-ordinated Varietal Testing Programme at Dry, Intermediate and Wet zones respectively. In farmer's fields under the production systems of rice fallow cropping in the wet and intermediate zones and deniya (owita) cultivation in the wet zone, CARI-426 consistently showed a yield increase over Wariyapola by 60% and 52% respectively.