

## **POTENTIAL CONTRIBUTIONS OF SWEETPOTATO VARIETIES TO ALLEVIATE VITAMIN A AND MINERAL DEFICIENCIES**

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The present study evaluated selected East African (EA) sweetpotato varieties to obtain information on the potential contributions of the varieties to alleviate vitamin A and mineral deficiencies. In total 89 farmer (white- and orange-fleshed) varieties and one introduced variety ('Resisto'), were analyzed for storage root quality using Near Infrared Reflectance Spectrometry technology. Deep orange-fleshed farmer varieties, 'Carrot C', 'Ejumula', 'Carrot Dar', 'Mayai' and 'Zambezi' had  $\beta$ -carotene content that can meet  $\geq 350\%$  of recommended daily allowance (RDA) with 250 g serving to a 5 – 8 year old child. More, but light orange-fleshed farmer varieties 'ARA244 Shinyanga', 'HMA493 Tanzania', 'K-118', 'K-134', 'K-46', 'PAL161', 'Sowola6', 'SRT52', and 'Sudan' can provide 50 - 90% RDA of pro-vitamin A of the child. The root minerals' content was generally low except for magnesium whose content can meet  $\geq 50\%$  RDA in many farmer varieties. However, in areas with high sweetpotato consumption, varieties 'Carrot C', 'Carrot Dar', 'KRE Nylon', 'MLE163 Kyebandula' and 'SRT49 Sanyuzameza' can make good intakes of iron, zinc, calcium, and magnesium. In conclusion, some EA orange fleshed farmer varieties can contribute greatly to alleviation of vitamin A deficiency and substantial mineral intakes.