

## Miscellany

### Three promising morphological variants in clove (*Syzygium aromaticum* (L.) Merr. & Perry) from Tamil Nadu, India

Clove (*Syzygium aromaticum* (L.) Merr. & Perry) (Myrtaceae) plantations are limited to parts of Kerala and Kanyakumari, Tirunelveli and Nilgiris districts of Tamil Nadu in India. The plantations have originated from a few seedlings introduced from Mauritius. The oldest clove plantation in India is in Ashambo hills (Kanyakumari district), the southern most hills of the country. Surveys were undertaken in these hills from 1992 onwards for identification of elite clove trees and variant types. Three distinctly different morphological variants located during the surveys are reported here.

#### King clove

A 25 year old clove tree of about 10 m height with almost a cylindrical canopy, yielding bolder and longer clove buds was located at Black Rock Estate. The diameter of head and length of flower bud were 0.7 and 1.4 cm in king clove, as compared to 0.5 and 1.3 cm, respectively, in the ordinary type. The fruits are dark reddish brown and look like normal clove fruits, but the seeds are smaller. The leaves are longer, thicker and broader than the normal type. The base of the leaf petiole and terminal portions of branches are purple. A mean of 11 leaves was observed in a length of 12 cm of shoot. The petiole was longer (2.08 cm) when compared to ordinary clove (1.40 cm).

#### Dwarf and bushy clove

Two 16 year old clove trees were located at Black Rock Estate. These are dwarf, bushy and about 2 m tall with a canopy width of 5 m. The main trunk is only 0.6 m in height with profuse branches. Each tree yields about 3 kg dry cloves per year (average of 1991-93). The fruits are reddish brown and smaller than the normal type. The leaves are arranged in a cluster and are longer, broader and thicker, compared to ordinary clove. A mean of 33.2 leaves was observed in a length of 12 cm of shoot. The base of the petiole is purplish.

#### Small leaved clove

Three small leaved variants were observed at Maramalai Estate (Government of Tamil Nadu). The trees are 5 m tall and the leaves are narrow and small. About 25 leaves were seen in a length of 12 cm of shoot, with close internodes. The branches of the tree extend to 0.75-1.00 m, as against 5-6 m of the normal type. The trees are about 25 years old yielding 8 kg dry cloves per year.

The variant types identified offer great potential in utilising them in breeding and hybridization programmes.

(B KRISHNAMOORTHY & J REMA, National Research Centre for Spices, Calicut - 673 012, Kerala, India.)