

Research note :

Inflorescence and nut characters of dwarf cultivars in coconut (*Cocos nucifera* Linn.)

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Coconut (*Cocos nucifera* (Linn.) is a multipurpose crop on commercial importance. Coconut grown in an area of 1.84 million hectares in India with annual production of 125.97 million nuts, Tamil Nadu with an area of 3.24 lakhs hectares holds the third position in the country with an annual production of 3.158 million nuts. Though India is in the fore front in coconut production in the world, the productivity is as low as 40 nuts per palm per year. There is an immense need to identify cultivars and hybrids suitable for manufacturing various industrial products such as coconut oil, desiccated coconut, shell charcoal, coir and coir products etc. Information on yield potentiality and nut characters of various tall and dwarf cultivars grown particularly in India will help growers to select appropriate cultivar according to the demand of local market as well as the demand of the coconut based industries. Systematic study for identification of suitable cultivars was initiated in Tamil Nadu at Coconut Research Station, Veppankulam during 1958, but the research related to this field is still meager. Therefore, the present study was carried out to study the production potentialities and morphological characters of nut and inflorescence of some tall and dwarf cultivars grown in Veppankulam.

Eight dwarf cultivars of coconut (*Cocos nucifera*.L) are maintained at Coconut Research Station, Veppankulam, TamilNadu, India, formed the materials for this study. The palms were planted in 1985 and the experiment was conducted in a Randomized Block Design with two replications. Observations were recorded from four plants representing each genotype in each replication. The mean data of the four palms were subjected to statistical analysis. For studying the nut characters, two nuts of 12 months maturity were

collected from each of the four palms at harvest.

Varieties used :

Dwarf varieties :

- 1.AOD (Andaman Ordinary Giant)
- 2.CGD (Chowchat Giant Dwarf)
- 3.COD (Chowchat Orange Dwarf)
- 4.GBD
- 5.MGD (Malayan Giant Dwarf)
- 6.MOD (Malayan Orange Dwarf)
- 7.MYD (Malayan Yellow Dwarf)
- 8.Ayiramkachi

Characters studied :

- | | |
|-----------------------------|---------------------------|
| 1. No. of spikelets | 6. Nut breadth (cm) |
| 2. No. of female flowers | 7. Whole nut weight (g) |
| 3. Bunches with button | 8. Dehusked nut weight(g) |
| 4. No. of functional leaves | 9. Copra content(g/nut) |
| 5. Nut length (cm) | 10. Copra yield(Kg/Plams) |

Among the eight dwarf cultivars under study showed distinct variation in their inflorescence and nut characters (Table 1). Andaman Ordinary Dwarf performed well for whole nut weight, Dehusked nut weight and copra content. N'cho et al. (1993) and Pillai et al. (1988) reported that the coconut cultivars would be characterized and classified successfully based on inflorescence and nut characters. No. of female flowers was highly reported in Chowchat Orange Dwarf (59.06) and Malayan Yellow Dwarf recorded high number of spikelets (45.5). Followed by MYD the cultivar named Gangabandan also had more number of spikelets (41.5).

In the present study Andaman Ordinary Dwarf is a best one for production of nut characters. Ayiramkachi is also a best one for production of female

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