

found damaging groundnut (*Arachis hypogae*) crop, and wild plants such as *Amarantus* sp. (Amarantaceae) and *Tephrosia* sp. (Leguminosae).

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<sup>1</sup> M. G. R. and N. R. Bhattacharjee, *Indian J. Ent.* 22 (4), 297, 1960.

### CEC of coconut pollen grains

Cation exchange capacity (CEC) of plant roots has been known since the first report by Devaux in 1916. However, only in the last two decades, importance of this property has been fully recognised. Information on root CEC of plants and its possible influence on the inorganic cation nutrition of plants have been discussed elsewhere<sup>2</sup>. That any cell which is growing requires nutrients for carrying out its metabolic activities is unequivocal. From this point of view the CEC of a pollen grain which grows on the substances of stigma and style assumes importance. This note is an account of CEC of pollen grains of different coconut genotypes (*Cocos nucifera* L.)

Collection of pollen grains was done as follows. Four days after the opening of the spathe, inflorescences were collected from different genotypes viz., West Coast Tall, Dwarf Orange, Dwarf Green and a hybrid, T×D (Tall×Dwarf). After removing the perianth of male flowers, anthers were oven dried at 37°C for 24 hr. after which they were tapped open to collect the pollen grains. Foreign particles were removed by passing the pollen grains through a 100 mesh sieve. CEC was measured by the potentiometric method<sup>1</sup> taking a 0.2 g sample in each case and tritating for 10 min.

The CEC values are presented in Table 1. The existence of this property is a proof of

TABLE 1 : Pollen CECs of different coconut genotypes.

Variety/ hybrid	No. of palms studied*	Pollen CEC (me/100g)	Standard deviation (+)
West Coast Tall	20	34.4	2.1
Tall × Dwarf	20	34.3	2.1
Dwarf green	6	33.6	0.9
Dwarf orange	7	35.4	2.0

\* Number varied according to availability.

Note : Difference between genotypes is not statistically significant.

the cation intake by the haploid pollen from the ambient female flower tissues by ion exchange. Between the genotypes tested there was no significant difference in the CEC suggesting that it may not be a varietal character. However, compared to that of roots<sup>3</sup> (16 me/100 g) the pollen CEC values were more than double. The existence of pollen being independent, the value of CEC represents its full capacity. Thus, a higher CEC of pollen seems to be justified.

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