

B-27 : CHROMOSOME COUNTS ON SOME ENDEMIC ORCHIDS

*Deepani Jayalath, V A Sumanasinghe, D B Sumithraarachchi**

*Faculty of Agriculture, University of Peradeniya, *Royal Botanic Gardens, Peradeniya.*

Determination of somatic chromosome numbers of a few selected endemic orchid species, available at the Royal Botanic Gardens, Peradeniya was carried out using root tips.

The basic smear technique was modified to achieve better resolution with orchids. Pretreatment with 0.002M 8 Hydroxy quinoline for 3-5 h at 4 c, was carried out followed by the fixation in a mixture of 3:1:1 modified Carnoy's solution. Then hydrolysis in IN HC1 for 10 minutes at 60 c was done, followed by staining in aceto orcein.

Somatic chromosome numbers of the six selected species were *Acampae rigida* ($2n = 34$), *Acampae ocharacea* ($2n = 38$), *Dendrobium crumenatum* ($2n = 36$), *Vanda parviflora* ($2n = 40$), *Vanilla planifolia* ($2n = 32$) and *Oncidium spp.* ($2n = 28$).

Of these, counts for *Acampae ocharacea*, *Dendrobium crumenatum*, *Vanda parviflora* and *Vanilla planifolia* are in agreement with the information already available. The numbers for *Acampae rigida* and the *Oncidium sp* have been reported for the first time. The chromosomes of all the species studied were small and thus studies on chromosome morphology were not feasible.