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Cytotaxonomic studies of three tropical ornamental aroids

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Cytotaxanomical analysis carried out on three ornamental aroids (Anchomanes difformis, Anchomanes hookeri and Arum Maculatum) proved that cytological studies is none negligible tool in phylogeny and scientific classificationns of plants. Aceto-orcein stain squash technique was used in this study. Anchomanes difformis and A. hookeri showed more relatedness in chromosome number and chromosome morphology, sharing the same chromosome number 2n=26, while Arum maculatum has 2n=16. Arum maculatum appeared more advanced than the others species because its chromosomes are much reduced in size and in number. Its longest chromosome is 9.45μ , comparing it with 20.30μ of A. difformis and 14.70μ found in A. hookeri. The average chromosome length of Arum maculatum is 5.56μ . The two Anchomanes spp varies in terms of their relative and average chromosome length, A. Hookeri has 11.23μ and more advanced than A. difformis, which has 12.00μ . Arum maculatum has more median centromere than the rest of the group studies but its chromosomes are more reduced in size and number to compare with the rest. The current classification of the group into different genus and species is supported by karyological data.

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