be spelled out in full as 'variegate', 'variegated'.

Excessively long words should not be used. Capital letters should be used for all words of a cultivar name (unless linguistic custom determines otherwise). Names should not include the words Cross, Crosses, Hybrid or Hybrids.

This has not been an exhaustive listing of the rules and recommendations; but the main ones have been mentioned.

Where do we go from here?

One would hope for reaction from the Board and from the Members. Assuming a Society concensus emerges it would seem AROIDEANA ought to become the medium for Members to register names for cultivars and for hybrids they create.

There remains the question of the plants that presently exist. I think this must rest with the Members. If there are sufficiently concerned or interested Members then, given a procedure to do so, in time someone will take on the role of assigning names in individual areas. It really is up to us once the Board takes the step of establishing the procedure.

PS: As for our example it would seem to me we should use the name *Alocasia micholitziana* 'Green Velvet'; that epithet being the most commonly applied. In case any Member is wondering; 'No. I didn't make it up and I don't know who did.'

As for the second example; the 'Green Cuprea'; my recommendation is that until further notice we assign it the name *Alocasia* 'Green Shield'.

Dieffenbachia Breeding: Transmission of Foliar Variegation to Hybrids

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Although Dieffenbachia hybrids have been reported from the late 1900s (1), nothing has been published concerning the inheritance of foliar variegation. Recent information concerning growth (2), control of flowering (4), and inducement of maximum seed set (3) has made *Dieffenbachia* breeding much more feasible. Information concerning inheritance of various morphological traits is also important to breeding programs. This article is a summary of data we have gathered regarding inheritance of foliar variegation from two *Dieffenbachia* cultivars.

The variegation patterns involved in this study consist of the bright and uniformly variegated type form, *D. maculata* 'Perfection' and the more irregular pattern of *D. m.* 'Hoffmannii' (Figure 1). Plants were induced to flower using gibberellic acid spray (4) and crosses were made using standard techniques (3). The two cultivars were self-pollinated and reciprocally intercrossed. *D. m.* 'Perfection' was also reciprocally crossed with a non-variegated species from Costa Rica. Subsequent seedlings were evaluated for presence or absence of variegation after approximately one year of growth.

Results from these crosses are sum-

marized in Table 1. Selfing or intercrossing *D. m.* 'Perfection' with *D. m.* 'Hoffmannii' produced a ratio of three variegated to every one green seedling. Crossing *D. m.* 'Perfection' with the green species resulted in a 1:1 ratio of variegated and green seedlings.

These results indicate that foliar variegation in these two *Dieffenbachia* is under control of a single dominant gene. It is also apparent that each plant was heterozygous for variegation. The gene for variegation consists of two alleles (or forms): one allele for variegation and the other allele for nonvariegation. A variegated *Dieffenbachia* 'Perfection' is heterozygous for variegation when it has one allele for variegation and one for nonvariegation. A seedling's appearance will depend on which allele it obtained from the other parent. When a plant has both the same alleles, either for variegation or nonvariegation, it will breed true for either condition following self pollination, such plants are termed homozygous for the gene in question.

From a breeding standpoint, the dominant genetic nature of foliar variegation makes development of new cultivars much easier. For example, if we want to combine the 'Perfection' leaf type with a plant that has red petioles, but green leaves, we can be assured that approximately 50% of the seedlings will have the variegated leaves. Which portion of those will have red petioles will depend on how that trait is inherited. The only way to determine the genetic basis of any characteristic is to make several crosses and carefully evaluate the seedlings for the presence or absence of each trait in question. Accurate and detailed record keeping is essential.

Other important morphological characters of *Dieffenbachia,* such as growth habit, suckering tendency and petiole coloration are also important to study genetically. Hopefully, future reports will provide information concerning inheritance of these traits so other people interested in breeding *Dieffenbachia* will have some idea of what to expect in their hybrid progenies.

Literature Cited

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3. _____ 1980. Producing *Dieffenbachia* from seed. Aroideana 3:94-95.
4. _____ 1980. Stimulation of flowering in *Dieffenbachia.* Aroideana 3:96-97.

Table 1. Segregation data for variegated and green foliage among seedlings from crosses involving *Dieffenbachia maculata* 'Perfection' and *D. m.* 'Hoffmannii'.

Cross	Total No. Seedlings	No. Variegated Seedlings	No. Non-variegated Seedlings	Ratio
D. m. 'Perfection' (selfed)	95	70	25	3:1
D. m. 'Hoffmannii' (selfed)	57	44	13	3:1
D. m. 'Hoffmannii' x *D. m.* 'Perfection'	208	150	58	3:1
D. m. 'Perfection' x *D. m.* 'Hoffmannii'	304	237	67	3:1
D. m. 'Perfection' x *D.* sp. (Green)	65	32	33	1:1
D. sp. (Green) x *D. m.* 'Perfection'	52	21	31	1:1

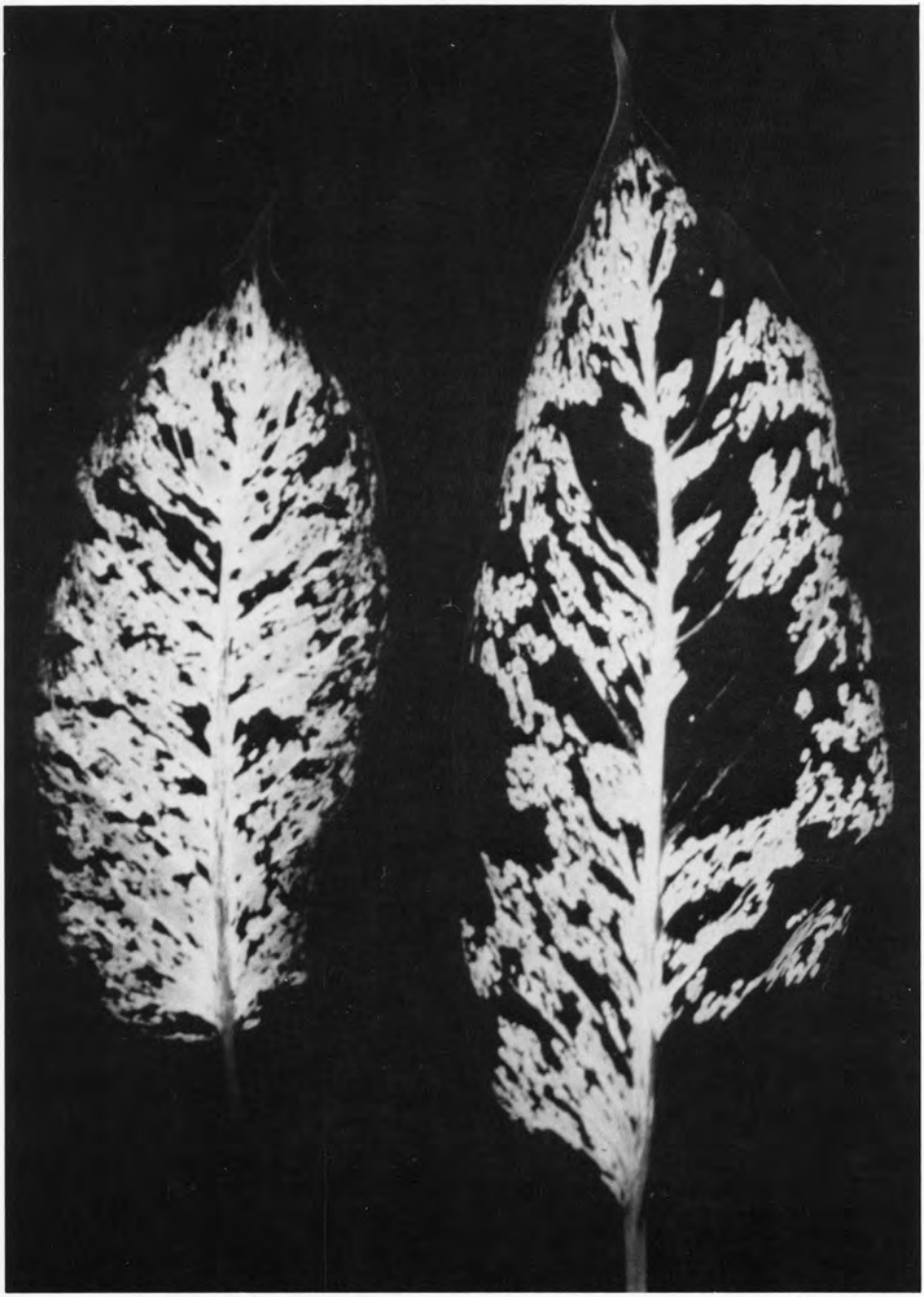

Figure 1. Dieffenbachia foliage variegation patterns: *D. maculata* 'Perfection' (left), and *D. m.* 'Hoffmannii' (right).