CROSSWORDS

THE GESNERIAD HYBRIDIZERS ASSOCIATION

NEWSLETTER

VOLUME NUMBER 2 ISSUE NUMBER 1 SPRING 1978

DIRECTOR'S MESSAGE

For the benefit of many newcomers, we must repeat our General Policy:

The vitality and success of this association is entirely dependent on its active members; participation is essential. Our major source of printable material must come from the members in the form of questions, answers to previously published questions, anecdotes on actual hybridizing happenings, etc. Articles and professional guidance from the many expert members are needed (and are quite noticeable by their absence, in most cases.).

Cost of producing CROSSWORDS is $1.00 per issue. Recent notices in various plant publications quoted the 1977 prices for membership. These prices proved to be too low. New members whom we welcome in spite of this statement sent checks for $3.00 as published. This has been noted in our files and only 3 issues will be sent unless you send payment for issue #4 ($1.00 in stamps only please). We must cover printing and mailing costs with the dues, as we have no advertizing income. Our production staff works free---we can't cut costs there.

In this issue we have an article by Paul Arnold, Registrar of the International Registration Authority for the Plant Family Gesneriaceae. STUDY THIS ARTICLE, it contains all you need to know about registration of your new hybrid name.

NOTE!

We still have copies of Volume 1, Issues 3 and 4 available for anyone interested. These will be priced at $1.00 each.

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If you are interested in outdoor growing, the RHA is for you. This is the ROSE HYBRIDIZER'S ASSOCIATION NEWSLETTER. Cost $4.00--- an excellent newsletter with many articles by experts and amateurs alike. Write Mr. Don Nielson, RHA Treasurer, 508 South Juniper, Toppenish, WA 98948

The Gesneriad Hybridizer's Association is a non-profit organization. The newsletter is published quarterly, copyright by G.H.A. The membership year is the calendar year, dues $4.00.

REVIEW OF PETER SHALIT'S GROUP PROJECT

The project of crossing S. 'Snowflake' x S. pusilla was designed to help the beginner with a practical example attempted individually. In it the recessives (white and fringe) of S. 'Snowflake' are temporarily lost when it is crossed with the dominant plain lavender S. pusilla. When the resulting hybrid is selfed both white and fringe are recovered, and a new hybrid (lavender fringed) is added. This will be a continuing project so feel free to report your progress anytime.

GROUP PROJECT---INTERESTING
Sandra Winslow, New Lenox IL

Since I am doing my first cross ever, it was a comfort to learn that Peg, our leader in the Sinningia department, had difficulty making this cross.

On a visit to Mike Kartuz in August '77 I purchased 'Snowflake' and believe it to be the slowest growing plant in my collection. It sent up three flowers between Oct. 1 and 14, each of which I clumsily emasculated with a sewing needle and through each long operation I wondered if I had made the cut in time to prevent selfing.

My plastic shoebox full of S. pusillas provided ample pollen, which I let dry as Peter Shalit suggested. The Oct. 4th. pollination took and several weeks later I collected about 20 seeds, which were sown on Nov. 17th. and started germinating on Dec. 9th. Jan 7th. I have eight seedlings in the 4 leaf stage, but I won't know if I have a cross until they flower.

I did not know what patience means until I started the project. 'Snowflake' is starting to bloom again and I have the pusillas on hand. I had better try another time for insurance.

REPORT ON GROUP PROJECT
Ila Hallowell, Albany, N Y

I have tried hybridizing a few times without appreciable results so I decided to be more cautious with my time and effort. Every issue of CROSSWORDS is read and re-read until it is dog-eared.

What others have to say gives me clues. For instance,when Peter Shalit suggested the group project of Sinningia 'Snowflake' x S. pusilla, I figured it would be too simple and easy to bother with, so I tried S. 'Snowflake' x S. hirsuta. Now, in the current issue, I find that the cross I tried is probably an impossibility, and the one I pegged for a cinch is difficult enough to be interesting.

So I shall follow Peter's suggestion--- and this time for the experimental fun of it, I shall try it when the moon is ascending either in Libra or Taurus. Will let you know when and if it takes, after seedlings are up...

GROUP PROJECT---DIFFICULT
Corinna Zirbel, Washington, C T

Peg! What persistance! I've only made two attempts without results in the primary cross Sinningia 'Snowflake' x S. pusilla. Considered both some fault of mine. Shall be interested to see what comments Peter may make. Shall continue but only sporadically as 'Snowflake' blooms. I picked up four more S. pusilla so as to have ample pollen.

REGISTRATION FACTS AND FANCIES

Paul Arnold

The Cultivated Plant Code[1] aims "to promote uniformity, accuracy, and fixity in the naming of agricultural, horticultural, and silvicultural cultivars which are normally given fancy names." Article 4 of the Code declares "Registration of cultivar names is of the greatest importance for nomenclatural stability."

Registration is defined[2] as "the acceptance of a cultivar name by a registration authority and the inclusion of this name in a register." Some countries maintain statutory registration bureaus for crop names but the U.S. does not. By international agreement, the following voluntary cultivar name registration authorities are located in the U.S.

African Violet Society (Saintpaulia)
American Begonia Society (Begonia)
American Boxwood Society (Buxus)
American Gloxinia & Gesneriad Society (Gesneriaceae excl. Saintpaulia)
American Holly Society (Ilex)
American Hemerocallis Society (Hemerocallis)
American Ivy Society (Hedera)
Arnold Arboretum (Chaenomeles, Cornus, Fagus, Forsythia, Gleditsia, Lantana, Philadelphus, Pieris, Ulmus, Wiegelia)
Arthur Hoyt Scott Horticultural Foundation (Syringa)
California Academy of Sciences (Escallonia, Hydrangea)
Los Angeles State & County Arboretum (Acacia)
U.S. National Arboretum (Pyracantha, Viburnum)

Plants are not registered; cultivar names are registered. The Code[3] defines the international term cultivar as "an assemblage of cultivated plants which is clearly distinguished by any characters (morphological, physiological, cytological, chemical, or others), which, when reproduced (sexually or asexually), retain its distinguishing characters." A cultivar name, therefore, applies to a) an assemblage of plants rather than a single

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(1) "International Code of Nomenclature of Cultivated Plants-1969." International Commission for the Nomenclature of Cultivated Plants of the International Union of Biological Sciences. Published by the International Bureau for Plant Taxonomy and Nomenclature of the International Association for Plant Taxonomy. Utrecht, Netherlands.
(2) Cultivated Plant Code, Article 55.
(3) Ibid. Article 10.

hybrid, selection, or mutant; b) characteristics that give the group unmistakable distinction from similar plants; c) capability of reproduction to produce quantities of individuals of the same distinction without reversion or excessive variation.

Examples of different modes of cultivar reproduction[4] are:

1) asexual propagation of a clone or several closely similar clones;
2) seed lines of one or several similar lines of normally self-fertilizing individuals, or inbred lines of normally cross-fertilizing individuals;
3) a group of cross-fertilized individuals which may show genetical differences but have one or more characters by which it can be differentiated from other cultivars:
4) an assemblage of individuals reconstituted on each occasion by crossing; including single-crosses, double-crosses, three-way crosses, top-crosses, and intervarietal hybrids.

Since plants are not registered, not hybrids or mutants, clones or seed lines--only the names given to such cultivar groups--the validity of a cultivar name must be associated with its "assemblage of individuals" by an adequate description. The Code[5] states: "In order to be valid the publication of a cultivar name on or after 1 January 1959 must be accompanied by a description or by a reference to a previously published description . . . The description should, when possible, contain particulars to distinguish the cultivar from related cultivars or, when this cannot be done, to place the cultivar in an accepted classification if available.[6] Parentage and history of the cultivar concerned, and name of the originator or introducer should be stated when known. Whenever possible an illustration should be provided with the description.[7] When appropriate a preserved specimen and/or an illustration preferably coloured, should be deposited in a public herbarium and be cited in the description."[8]

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(4) Cultivated Plant Code, Article 11.

(5) Ibid. Article 39.

(6) Ibid. Recommendation 39A.

(7) Ibid. Recommendation 39B.

(8) Ibid. Recommendation 39C.

Valid Publication

Mere usage of a cultivar name on plant labels, in display advertising, in private records, or in personal correspondence does not legitimize such names, according to Article 33 of the Code. In addition to priority of usage and correct form of a cultivar name, a legitimate cultivar name must have been "validly published" together with an adequate description.

"Valid publication of a cultivar name is effected by the distribution to the public of printed or similarly duplicated matter."[9] In addition to public accessibility to such publications, the Code recommends deposit of copies in suitable libraries. Names appearing in nontechnical newspapers, in undated catalogs, or in hand-written documents (even though reproduced by some graphic process) are specifically not validly published.

Even though validly published, cultivar names that are incorrect in form are illegitimate.[10] Correct cultivar names cannot be in Latin style. They must consist of 1 or 2 words, never more than 3 (including arbitrary sequences of letters, abbreviations or numerals); cannot contain the botanical name or common name of a genus or the common name of a species; must not (hybrid cultivars) combine parts of the Latin epithets of the parents; must not contain the word "variety" (or var.) or "form," always must be preceded by the designation "cultivar" (or cv.) or enclosed in 'single quotes', or both, when immediately following a botanical or common name, and all words in a cultivar name require a capital initial letter.

Collective Epithets in Modern Language

In addition to defining cultivar names and specifying their permissible forms, the Cultivated Plant Code provides for "collective epithets" for interspecific hybrids. Such epithets are not in Latin form and not subject to the Botanical Code.[11] "All derivatives from the same parental combination

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(9) Cultivated Plant Code, Article 37.

(10) Ibid. Articles 27 through 31.

(11) Ibid. Article 18.

of two or more species have the same collective epithet in a modern language (with some exceptions, as in the case of orchid, where long established customs prevail). The Cultivated Plant Code collective epithet is not enclosed in single quotes like a cultivar name but is otherwise similar. It is "a word or phrase of not more than 3 words, in a modern language" and may contain a word such as Hybrid, Hybrids, Cross, Crosses, grex (or g.), etc. Such an interspecific group of plants often contains individuals of great diversity, some of which may be selected for individual cultivar names and descriptions. In such cases the modern language collective epithet preceding the cultivar name is placed in parentheses, for example, *Lilium* (Bellingham Hybrids) 'Shuksan'.

Code Article 19 further requires "when introduced into cultivation, a cultivar of an interspecific hybrid must be given a cultivar name *in addition to* the collective epithet formula, even if only one cultivar of the hybrid is known. (Emphasis added). For example, *Columnea* ×*Woodii* was published in 1958 for (*Columnea crassifolia* × *C. nicaraguensis*). The clone introduced commercially in 1960 bore the cultivar name 'Harvard Window', selected by Prof. Moore when the oversight was noted.

Preferential Forms of Cultivar Names

The Cultivated Plant Code "strongly recommends" that new cultivar names avoid the following forms to avoid confusion:

a) names containing arbitrary sequences of letters, abbreviations, or numerals.
b) names requiring an initial article, unless required by linguistic custom.
c) names beginning with abbreviations other than "Mrs." in English names.
d) names containing forms of address other than Frau, Madame, Mrs., Señora, and equivalents in other languages, for married women.
e) names containing excessively long words or phrases
f) names exaggerating the merits of cultivars which may become inaccurate through later introduction of new cultivars.
g) names referring to attributes common or likely to become common to related cultivars.

h) names enough like existing cultivar names in the same or a closely related class to risk confusion.

i) names including the words Cross, Crosses, Hybrid, Hybrids, or grex.

Submitting Cultivar Names for Registration

An Appendix to the Cultivated Plant Code-1969 recommended that Registrars require certain details to be submitted with requests for registration of cultivar names in addition to items required by the Code. Name and address of the originator (plant breeder or discoverer of a sport); of the introducer who made the cultivar available to the public; and the describer or namer were to be requested. Particulars of testing were to be sought by the Registrar in furtherance of Code Article 53, which notes: "Acceptance of a name for registration does not necessarily imply judgment on the distinctness of the cultivar from others, or on its agricultural, horticultural, or sivicultural merit. The testing of cultivars for distinctness is, nevertheless, of the greatest importance and should, when possible, be carried out before a name is accepted for registration." The AGGS management has been pressured for years to set up a cultivar testing program to supplement the International Gesneriad Register effort.

The Rules for Registration of Gesneriad Plant Names adopted by the American Gloxinia Society when it took over the International Gesneriad Register (printed on the Registration Request form) call for considerable detail. However, great leniency (not to say charity) have been used by the Registrar from the outset in compiling names and in issuing registration certificates for cultivars that are technically invalid in some respect or accompanied by less than adequate information. The aim has been to encourage the formal registration of cultivars by setting up as few technical hurdles as possible, especially for the amateur grower, as a first step in compiling and publishing as much detail as possible about plants in the trade.

Despite such encouragement, most dealers have ignored the cultivar registration opportunities provided by the AGGS. Consequently, the Society is not able to follow the lead of those other plant societies with registration facilities that refuse to accept unregistered cultivars in their flower shows.

P.A. 22 Oct.1977

SUGGESTION...from Peter Shalit, Seattle, WA

Peter suggested that we ask the members to review one genus at a time. It would help everyone involved to write what they think can or should be done in a particular genus. Everyone needs a little inspiration to get started on a hybridizing program. Your chance suggestion or remark could start the whole group working on a worthy project. You need not have done any actual hybridizing, just research past results within the genus of the quarter, make your report and make suggestions for future attempts that might be an improvement over the species.

(We like Peter's suggestion and since Sinningia was #1 in the membership poll [CROSSWORDS, 1:4],we will continue to publish articles on this genus as they arrive. The others will be designated genus of the quarter in order of their popularity. This makes Streptocarpus GENUS OF THE QUARTER. Let's see what you can come up with in the form of a report, an article. If you can't make it by issue #2 deadline, May 1, 1978, send it in for issue #3, August 1, 1978.)

MY RECORD KEEPING AND NUMBERING SYSTEMS
Peter Shalit, Seattle, WA

It might seem that you can keep all your records in your head; but I know from experience that such a procedure soon degenerates into confusion and simply writing the parentage of a plant on its label soon becomes impossible. Have you ever tried to fit (Sinningia cardinalis 'George Kalmbacher' x S. eumorpha) x S. 'Velvet Charm' onto a label? Not to mention what happens when you cross that plant with another one! So I have set up a rather arbitrary numbering system. Every plant is assigned a 3-digit number. For Sinningias, which I work with the most, there is no prefix; for other genera, I use a 2-letter prefix to denote the genus (eg. ST-101 is a Streptocarpus, SM-101 is a Smithiantha). At the beginning I simply assigned a number to every Sinningia I had, using no rhyme or reason other than my personal whims, and wrote them down in a book. S. 'Dollbaby' for example happens to be 305; S. cardinalis 'Innocence'is 143; S. cardinalis 'Skydiver' is 144; S eumorpha is 081. Now today suppose I put pollen from S. eumorpha onto the stigma of a flower of S. cardinalis 'Skydiver'. On that pedicel, I affix a tag which says "144 x 081, 12/2/77". (Female parent first, always; consistency avoids confusion. The tags are simple white tags with string loops attached, an item sold in stationery stores.) I also enter the information on a page in my notebook which contains the following headings: Female Parent, Male Parent, Date Made, Date Harvested, Seed Planted. When the seed ripens and has proven to be viable, I assign a number (arbitrary of course) to the seedlings from the cross. Say I decide to call them 270. When transplanted to their own pots, they would be labeled 270A, 270B, etc. so that different seedlings from the same cross can be distinguished. I have found this system to be quite satisfactory; it didn't take me long before I found I knew most of the numbers by heart. I am sure that there are other systems where the number assigned to a plant bears some real relation to the plant's origin; my numbering system makes about as much sense as the system of numbering U.S. highways. But it works for me.

HYBRIDIZING IN NEW ENGLAND
Reported by A & P

At the final NECH of AGGS meeting of 1977, Frances Bacheller gave an inspiring lecture on hybridizing basics. In the following report, we will try to convey our impressions of the message she had for all of us. Most of you know Frances, but we in the New England chapter are fortunate to know her better. When she has something to say, we listen; we respect her vast knowledge of the Gesneriaceae, and would like to share some of what we have learned from her with all the members of the GHA.

As Frances pointed out, we New Englanders enjoy the benefits of being in the center of gesneriad hybridizing. (A large proportion of NECH members also belong to GHA.) The leaders are: Frances, with many hybrids registered and introduced, including Sinningia, Kohleria, and some very interesting intergeneric crosses.....Bill Saylor, whose work with Nematanthus and Aeschynanthus (to mention just a couple of genera) is well known.....Dr. Nixon, who has shown us successful results in many beautiful Sinningia hybrids. Ed Bernard, Walter Barry, and the team of A & P are others in this area who are caught up in this intriguing hobby. On the commercial side of gesneriad hybridizing, we have the well-known Mike Kartuz in the very center of New England. He too believes in spreading the knowledge, and is always ready to answer questions regarding our favorite subject. Bill Richardson, located on Cape Cod, is another commercial member who is now actively hybridizing, and who is also helpful in solving any problems that may arise.

Why hybridize? Frances gave one reason in these words: "Pride of parenthood. There is an indescribable feeling of achievement when you look upon your own hybrid." (With these words, Frances really expressed what A & P have been trying to put across to the members of GHA in the pages of CROSSWORDS in the past four issues. There is nothing like that feeling.) Other logical drives toward hybridizing relate to the search for the new and really distinctive gesneriad, or towards findings which settle botanical curiosity. (What will cross, and if it does, what will it be?) It is best to plan a hybrid so that it will be an improvement over the species. Another goal to consider when planning a breeding program is to try for plants more adaptable to home conditions. Compact, everblooming plants are always in demand.

As Frances went on with her lecture, she covered all phases of manipulations necessary in the actual hybridizing, right from the emasculation which is one of the first steps, (after selection of good parent plants), to the sowing of the hybrid seed. Basically, she advocates the use of magnification, along with practice, so that you may become <u>really</u> familiar with the observation and handling of plant parts. By doing this, you will also learn the location of the unripened pollen in relation to the stigma at the early bud stage of the gesneriad which you are planning to work with. Carefully dissect the blossom and remove the pollen sacs, which can be dried and saved for future use. Watch for stray pollen; if you see ANY loose grains, (some may have accidentally have fallen on the stigma as the plant was moved from one spot to another in the hybridizing process) go on to another bud. Compare the appearance of the stigma by checking it each day; be persist-

(cont.)

ent and you will soon know what a mature stigma looks like. Apply foreign pollen (from the other parent) each day as you are looking; you can never use too much as you want full seed pods, and one grain of pollen can produce but one seed.

All these manipulations are tricky; even hanging a tag on a pedicel of the flower can be a difficult task. Please be aware that the smaller the plant, the harder it can be to emasculate with any degree of certainty. (e.g. Sinningia pusilla or Gesneria Quebradillas) With these, use more care and observation for loose pollen grains with your magnifier. All this caution MUST be practiced to prevent time-wasting effort being expended in the handling of seeds which were self pollinated. If you have a real hybrid, the first generation of seedlings will be a BLENDING of the parents with the complications of dominance added to the blend. Frances described it in this way: The characteristics of first generation hybrids do not mix to a perfect blend like paint, but to a mix like a woven blanket, with the dominant characters displayed on the surface, concealing the recessives. The weave would have to be unravelled to reveal all the types of yarn contained therein. This unravelling would be compared to the second filial generation, where the recessives usually reappear.

NEW COLUMNEA HYBRIDS FROM THE CAPE

W. B. RICHARDSON, GESNERIAD GROWERS, Orleans, MA

'Adark Horse' (C. 'Magic Lantern' x C. erythrophaea)
3" dark red, hairy flower with yellow throat, maroon calyx. Leaves are 3"x1" with maroon veining. Very strong semi-trailing. Recurrent bloom.

'Fire Cracker' (C. 'Dennis Adams' x C. erythrophaea)
3" orange flower, edge of corolla suffused red, large saw-toothed, bright red calyx. Leaves 2½" x 1" with deep maroon underside. Very strong, semi-upright. Recurrent bloom.

'Tomahawk' (C. 'Cherokee' x C. erythrophaea)
3" bright red/orange, fuzzy flower on 1" pedicels, erythrophaea calyx. Red veined leaves are 2" x 1". Semi-trailer. Recurrent bloom.

'Embers' (C. 'Chocolate Soldier' x C. erythrophaea)
3" Rust red, fuzzy flower with orange throat, erythrophaea calyx. Dark red 2"x1" foliage. Strongly branching semi-trailer. Recurrent bloom.

'Cannonball' (C. rutilans x C. erythrophaea) x C. erythrophaea
4" orange flower, sometimes larger, huge calyx fully 1"x1", stiff, waxy, green with red tips on 1½" pedicel. Plant resembles erythrophaea in flower and leaf, much more vigorous, strongly branching. Recurrent.

'Cinnamon Toast' (C. 'Gold Spice' x C. erythrophaea)
Soft, orange/yellow, 3" flower, maturing to cinnamon color on hood, covered with bristly, rust colored hairs, erythrophaea calyx. 1½"x1" olive green leaves. Strongly branching. (Long lasting flowers create very heavy bloom). Recurrent.

SOME QUESTIONS...from Bob Stewart, Stowe, MA

Bob sent in a list of subjects to be used as questions or as suggestions for future articles or reports from the members. Pick your topic from among these, we will all appreciate your efforts.

1. TRUE BEARING SEEDLINE---REPORT
Hybridizers frequently talk about the necessity of breeding a hybrid until the seed produces identical plants. Is this done only to make commercial propagation easier, or is there another reason?
WE ARE GOING TO NEED REPORTS ALL YEAR, HOW ABOUT THIS SUBJECT? (ed.)

2. HYBRID EVALUATION---REPORT OR ARTICLE
How do you evaluate plants quickly? I assume it must be vital to get rid of unpromising lines quickly to prevent overcrowding. Are there special techniques for getting plants to bloom young? Is it worth while keeping a plant with good flowers but sporadic bloom in hopes of crossing it with something constantly blooming but dull?

3. INTERGENERIC CROSSES---REPORT.
What intergeneric crosses exist and what do they look like?

4. ASEXUAL REPRODUCTION---Question?
We have a Saintpaulia hybrid named 'Sassy Lass' which displays an unusual asexual reproduction problem. If propagated from an offset the new plant has flowers like the parent. If propagated from a leaf, the new plant has flowers which do not resemble the parent and don't appear to be the same leaf to leaf. All parts of the plant presumably have the same genetic material, so why the difference in the vegetative progeny? What would you get from tissue culture growth of cells from a leaf, a lateral bud, a flower stalk?

5. MUTATIONS---REPORT.
I understand that some of the new Streptocarpus were produced as mutants from irradiated seed. Do we know how many plants they had to grow to produce a good plant? What kind of radiation and what dose was used? Is there some place we can send seed to be irradiated? What other techniques are used to increase the incidence of mutations?

NEW COLUMNEA HYBRIDS FROM CONNECTICUT
LAURAY OF SALISBURY, Judy Becker

'Kaye' (C. "Constant Flame' x C. 'Mary Ann')
Flowers the color of C. 'Constant Flame' with size intermediate between the two parents, good blooming characteristics of C. 'Mary Ann'.

'Nelly' (C. 'Butterball' x C. erythrophaea)
An upright plant with yellow flowers carried as C. erythrophaea's with red/orange edges and covered with reddish hairs.

REPORT ON STREPTOCARPUS
Frances Batcheller, Durham, NH

In the past, I have tried crossing Saintpaulia species with Streptocarpus holstii and caulescens, with no success. Perhaps some of the more recently introduced caulescent species might be more successful.

MORE NUMBERS
William R. Saylor, Brewster, MA

Another simple numbering system that gives a little additional information has served me pretty well for the past decade and may be interesting to some of our members. It grew like Topsy after spur-of-the-moment beginnings. The first cross was identified as "C1" designating merely the "first Columnea cross". All progeny from that mating carried the same identification until such time as I wanted to select an individual for any one of a number of reasons. Then a letter designation was added with letters chosen in alphabetical order. Thus "C1A" is the first individual selected from the seedlings resulting from Columnea cross No. 1.

Letter designations for crosses have been selected rather haphazardly, but always in a code designating the genus involved. So far these have served their purpose to my complete satisfaction. Looking over my stud book I find these examples:

Aeschynanthus	A
Columnea	C
Hypocyrta	H
Nematanthus	N
Sinningia	S
Saintpaulia	SP
Streptocarpus	ST

In addition I have used the letter "I" to identify intergeneric crosses. The stud book then must be consulted to tell which genera are involved. Sometimes, as in the case of Hypocyrta-Nematanthus crosses, the significance of an intergeneric designation gets lost when one genus is merged into another at some later date. 'Bijou' as an example was a cross between Hypocyrta wettsteinnii and Nematanthus fritschii and was identified as an intergeneric thus "I8A". At that point eight intergeneric crosses had been made and 'Bijou' as the first selection to be identified from among the progeny of cross No. 8.

Occasionally I have used a number as a prefix to show that the progeny in question are a second or third generation in my breeding program. Thus Nematanthus (then Hypocyrta)'Mardi Gras' was identified as "2H1A". It is a cross between 'Tropicana' (H8A) and 'Rio' (H1A).

One advantage to a system like this over one that merely assigns a chronological number to a given hybrid is that the number is more easily remembered and often all you want to know can readily be brought to mind without reference to the greater detail contained in the stud book.

FROM MIREE M. LEX, Toronto, Canada

Why do the stems on Sinningia 'Snowflake', 'Tinkerbells' and 'Bright Eyes' fold after forming pods?
INSTANT ANSWERING SERVICE: Sinningia 'Snowflake' is a bit reluctant to set seed when self pollinated; 'Tinkerbells' is sterile, both seed and pollen; 'Bright Eyes'is pollen sterile. The stems fold along with the pods which really had not set seed but only appeared to be forming pods. This is a little trick developed by Sinningias to delude us into thinking we have a take.

William K. Saylor, Brewster, MA

In Vol. 1, No. 3 of CROSSWORDS on page 12, Art and Peg Belanger reported complete elimination of their nuisance population of aphids and white fly after two sprayings with the "insect growth regulator" Enstar 5E two weeks apart. The purpose of this contribution is first to chalk up one more astounding victory for Enstar and second to suggest in the next to last paragraph below an additional dividend it can possibly be expected to supply. My plant collection has become very crowded to say the least in recent years. In addition I have consistently avoided the very lethal insecticides used by most of the commercial growers. My futile battle has been aought with things like Pratt's White Fly Spray, Isotox, Noculate, etc., etc. They have helped but have generally only reduced the population. Enstar has been used just twice about four months ago and there has been no sign of either pest for the last three of those months. The results have been little short of miraculous.

Now a bit of bad news that probably reflects Enstar's growing success—the price has gone up from $36 to $42 a pint, plus shipping charges.

And finally an expression of a fond hope regarding possible extension of Enstar's possible usefulness in combatting other houseplant pests. The manufacturer makes no claim for it other than that it is effective against those two pesky bugs, white fly and aphids. However, they do say "Enstar is specific for insects of the order Homoptera". We looked up Homoptera in our bug book and Glory be! -- in addition to white fly and aphids we found listed both scale and mealy bug. Enstar seems to affect its targets in just about all stages of development and so we are watching carefully to see if there is any sign of eradication of either of these other pests. Perhaps the early nymph stages will be more susceptible than the adults. Our particular concern is with soil mealy bug because its dastardly work is done "under cover" and very little else seems to affect it.

We hope other users of Enstar 5E will report their experience with special reference to its effect upon these additional members of the order Homoptera.

THE SAINTPAULIA HYBRID

Isla Montgomery, Denver, CO

Hybridizing characteristics for Saintpaulias have been compiled in an article by Dr. Sheldon Reed, which was published in the African Violet magazine, September, 1973.

Most of my hybridizing efforts with Saintpaulias have involved the use of plants with variegated leaves. The variegation in the Saintpaulia is carried only through the seed parent. I began with S. 'Tommie Lou', which held the position of number one favorite variety for several years. During the height of its popularity it was considered sterile. The first recorded seed pod came from Harold and Cordelia Rienhardt in the late 1960's. Since then several crosses have been made but it is still considered difficult. One characteristic which seems to be dominant from this plant is the pink blossom stem and calyx, which has shown up in abundance even into the third generation.

Saintpaulias have been hybridized to the point that they must be proved before they can be introduced. When you find a good seedling, take a leaf and plant it. When leaves are large enough on the second generation plant, go ahead and start the third generation. You must wait, however until both second and third generations have bloomed and all three generations must look exactly alike. When they have bloomed you may register the name of the new hybrid by writing to the registration chairman whose name is listed in the African Violet magazine.

FROM ONE BEGINNER TO ANOTHER

Pat Tracey, Barrie, Ontario

I started hybridizing Saintpaulia five years ago, as collecting plants was not stimulating enough for me. It is very hard to find plants here in Canada; most of us have had to grow from seed for years. Out of this experience I have developed a system for keeping records. Select parents with a definite purpose in mind. Tag the flower stem using the pod parents name first, date, and give that cross a letter. This cross is then listed in a record book with room for all pertinent data. The transplanted seedlings receive a tag with a letter for that cross and numbers are added to each only when they they bloom and a description is written in the record book for them.

I find it easier to remember (G-1-76 or G-2-76) than all numbers. Due to limited growing space all near duplicate or inferior plants are weeded out while the plants which show good traits are given a name and used in future crosses.

I want to start the BEGINNERS PROJECT but don't have Sinningia 'Snowflake' yet. I have S. pusilla and S. concinna and after months of trying finally got a pod that I am sure isn't selfed. So far I'm swamped with S. pusilla and am using it as pod parent because it has more blossoms for me.

ALWAYS LABEL YOUR CROSSES

Howard O. Burns, Greenfield, WI

I had been growing Saintpaulia for perhaps six or seven years but tired of putting down leaves in the usual manner. Having read many articles on hybridizing, I started making some crosses which were labeled in great detail. I waited for results---nothing. I tried again---nothing. This went on for a period of perhaps two years, always with the same results---nothing. About this time I became interested in growing other gesneriads from seed and temporarily forgot about hybridizing.

One day while caring for my plants, I noticed Saintpaulia 'Snow Star' was loaded with blossoms, many others were in good bloom also. I put pollen from the other plants on the stigma of many 'Snow Star' blossoms---did not bother to label them, why should I? Nothing ever happened before so why should I get lucky now?

I did---would you believe that I got thirteen seed pods and they all ripened without mishap? DAMN! why didn't I label? Maybe I will be able to tell from the flowers which pollen was used. Twelve seed pods did germinate and as you can imagine, I had a ton of plants from all that seed. I kept twenty eight assorted plants and out of them I have three that I feel are worthy of further development. I now have grown them through three generations of cuttings and they are holding true.

I wonder who the pollen parents were? Why didn't I label these crosses? I hope others will profit from my experience as I have. I know I will never be caught in this predicament again. I will always label my crosses.

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For the GHA to go on in 1979, a volunteer must come forward to serve as its director. My original goal of producing CROSSWORDS for two years ends with the December 1st, 1978 issue. If CROSSWORDS is to continue, the new director must take over and, with his own slate of officers, put out the newsletter in a similar, or if he prefers, different format. Peg and I would be willing to serve as membership co-chairmen, if he would so desire.

Art Belanger

REQUIRED READING FOR NEWCOMERS

If you are new to hybridizing, you must read two Brooklyn Botanic Garden Handbooks. Some of the questions we receive indicate this need. The basics are so well covered throughout "Breeding Plants for Home and Garden" that you will become more knowledgeable by reading it. This booklet at $1.75 is a bargain. It is # 75.

The second BBG booklet #53, "African Violets and Their Relatives" has general information on gesneriads plus the chromosome numbers on most of the commonly grown genera.

COMING SOON

MORE ON SINNINGIA HYBRIDIZING.....by Ted Bona
INTERGENERIC FACTS.....by Frances Batcheller
GESNERIAD GLOSSARY.....by Frances Batcheller
USING COLCHICINE.....by Art Belanger
A COLUMNEA STUD LIST...pointing out what crosses have been made in this large genus. By using it you can trace the heritage of the hybrid that interests you.

GESNERIAD HYBRIDIZER'S ASSOCIATION MEMBERSHIP APPLICATION/RENEWAL
Please enroll me as a member of the G.H.A. Enclosed find $4.00 for a years membership and CROSSWORDS, the quarterly newsletter.
(based on the calendar year, 1978.)

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