

## The Importance of Labeling Living Plants

Thomas B. Croat

Missouri Botanical Garden

P. O. Box 299

St. Louis, MO 63166

One of the first things we ask when we encounter a stranger is his or her name. Often even before we mention names, we are interested in knowing where they are from and where they live. So it is also when we are introduced to a new plant species. It is only natural for us to want to know names and locations, and to most of us, those answers are essential. Although aroids are considerably more complex taxonomically than any other group of plants and are often temporarily without names, there is really no excuse for not knowing where the plant came from. The only guarantee that this information will always be available to us is to use some form of permanent labeling. Though I have made successful appeals to many members of the International Aroid Society personally in the past few years, I would like to make an appeal here to the entire membership concerning the importance of marking live collections.

There are many kinds of marking tags available which are relatively permanent and easy to use. (See Appendix I for descriptions and sources of these and other items I will mention in this article.) For small vining species, especially for many *Monstera*, *Philodendron*, *Syngonium*, and smaller short-stemmed *Anthurium*, I use small aluminum tags (Appendix I.1), which I write on with a ball-point pen. Similarly, plastic tags may be used which come in a large roll (Appendix I.2). These are designed to be looped over the stem of the plant and can be written on with a permanent ink marker or with a pencil. For larger plants, it is necessary to use aluminum tags with copper or stainless steel wires (Appendix I.3). These are also available

in thick plastic (Appendix I.4).

Anyone collecting in the wild should mark each plant as soon as possible to prevent confusion about where it might have been collected. Taxonomists always prepare herbarium specimens of their collections when they are gathering live plants. I always prepare the tags for the live plants at the same time I am preparing the herbarium specimens so that they are assigned the same number. For those who are only preparing live collections, it is much simpler. One merely needs to record on the tag the collecting locality. If this is considered too much work, one merely needs to record a locality number and keep a separate log of collecting sites. For example:

Site 1. Ecuador: Pastaza: 3 km e. of Puyo, elev. 500 m.

Site 2. Ecuador: Napo: 8 km n. of Tena, elev. 1,200 m.

With such a system, all collections can be tagged quickly and efficiently.

In addition to the aluminum tags which I use in the field, I also mark the plants with plastic pot stakes when they have been potted up in the greenhouse. The plastic stakes are easier to read, but the "permanent" markings eventually weather away and the plastic becomes brittle and may be broken during watering or maintenance operations. They may also simply be washed out of the pot from time to time during watering. To guard against loss of information when this happens, I always bury the more permanent aluminum tag made while in the field in the potting soil with only a small part of the end of the tag sticking out. I have found these aluminum tags to be readable after many years in the potting soil. Another easy method of mak-

ing permanent pot tags, which can be buried, is with a tape-writing device (Appendix 1.5) which will emboss letters or numbers into vinyl plastic, aluminum or stainless steel tape.

Just as important as the marking of plants collected in the field is the marking of any propagules, cuttings, or seeds of a wild-collected plant. Once a plant leaves the original collector, there is often little hope of reconstructing precise information about its source of origin. Cuttings should be marked as soon as they are made and seeds as soon as they are removed. Unless one's plant collection is very small, it is best not to try to rely on memory. I have visited many collections and it is rare indeed to find an unmarked collection of any size where the collector could remember the source of all his collections. Moreover, I have found cases where a specific collection is reported to have come from one place on one visit and another place on another visit. Clearly one's memory will not serve long for a sizable collection, and tagging plants is the only solution. It is equally important for those who receive plants from friends or from commercial dealers to demand accurate source information. Sometimes a bit of sleuthing is necessary, and often by tracing back only two or three transfers of the plant, one can come up with the original collector and probably get accurate source data.

For those with an especially intense interest in their collection, I would suggest starting a card file for the collection, assigning a unique number beginning with 1 for the first plant, and then continuing to add to the series as additional plants are acquired. This collection card, in addition to having the collection number and the name of the plant, should also contain the source of origin. For example:

Ecuador: Pastaza: 3 km e. of Puyo, 500 m., June 1, 1980, or

Received from Joe Wright, 6-3-83.

The same card can be used to record

how many duplicates of the collection there are, to whom the cuttings are sent and when, as well as any other pertinent information. Then if a plant is propagated and distributed, a tag with the collector's name and number should be sent along with the plant. The reason for this is that all plants, even different members of the same species, are unique and even though a plant is propagated and distributed, the original source of that particular genotype will be traceable.

Plants of known hybrid origin should also be carefully marked, but assigned another number. Several of us have adopted a system for identifying hybrids. This system, which I adopted from Dr. Richard Sheffer, involves marking the hybrids with our initials followed by a pollination number; this number is then recorded in a ledger which gives data on parentage. For example: TC278 is a hybrid of *A. purpureospathum* Croat and *A. luteynii* Croat. Both of the parents have regular Croat collecting numbers but because the plant is a hybrid, it gets a different unique number in a different series preceded by my initials (unlike my collecting numbers which are preceded by my full last name, e.g., *Croat 38600*).

Now that I have stressed the need for tagging live plants and how it might be done, some will still ask how important it is. Certainly the tagging of plants is a lot of work and some expense. Is it really worth it? The comment will be made, "I really don't care where they come from as long as they're pretty." Some people, I suspect, don't mark their plants because they don't want anyone else to find them. I don't adhere to this long-standing idiosyncrasy in plant collectors, preferring instead to see plants widely distributed so that everyone can enjoy them. The marking system I described earlier, using numbers for localities, does not automatically divulge any information to competitors, but still leaves data

accessible if the collection proves to be scientifically valuable. If one wants to be particularly devious, these numbers can be further encoded so that special plants have a unique locality number.

In reply to all of the objections raised, I can only say that tagging is not only worth it but essential if the taxonomic puzzle of the aroid family is to be solved before the wild populations of plants disappear forever. With so few persons working taxonomically on such a large family, it is imperative that horticulturists, especially Society members, cooperate in any way they can. Increasingly larger numbers of wild-collected plants are being imported from the tropics. In many cases, these plants are never recollected in the wild, and consequently, the only source of study material is in the hands of horticultural enthusiasts. Though most of us would like our plants named, it is often difficult or impossible to identify material where no source information is available. Furthermore, it is foolish to describe cultivated material before its source of origin is known because the plant might be of hybrid origin. In spite of this hybrid complication, though, there are probably large numbers of undescribed species in living collections. If sources of origin were known, it would make it easier to identify or describe these species. In some areas of the neotropics, between 25% and 50% of the aroid flora is probably new to science. Horticulturists could play an important role in making these new species known to science if proper documentation were made to isolate the source or origin. All of us, as members of the International Aroid Society, should make every attempt to assist in the job of naming and classifying members of the family. I hope this article will encourage everyone to make a greater effort, however small it might be, to ascertain source data for their collections and pass this information on with the plants they distribute.

### Appendix I: Available Tags and Marking Systems

1. Aluminum tags 1" x 3-1/2" (2.5 x 8.8 cm); write on with pencil or ball-point pen; one edge folds back to wrap around plant stem; ideal for stems up to 1 inch (2.5 cm) diam. Available at:

- a) Forestry Supply Inc.  
P. O. Box 8397  
Jackson, MS 39204-0392  
(Tel.: 1-800-647-5368)  
#79178 Perma-Tags; 1-9,000  
\$22.85 per 1,000  
10,000 or more \$20.40 per 1,000
- b) H. Hummert Seed Co.  
2746 Chouteau Ave.  
St. Louis, Mo 63103  
(Tel.: 1-800-325-3055)  
#49-1700-1, Box of 500  
aluminum tags, 1-9 boxes \$8.90  
#49-1700-2, Box of 500  
aluminum tags, 10 or more  
boxes \$8.00

2. Plastic Fastlock roll labels; fold back around stem, insert through hole, lock in place. Available at A. H. Hummert Seed Co. (see above).

- a) 1/2" x 5" (1.2 x 12.7 cm) 1,000 per roll — Available in white, blue, green, orange, pink, red, and yellow (catalog number differs with color; #49-20005 is white)  
1-9 rolls \$9.85 per roll  
10-24 rolls \$7.95 per roll
- b) 3/4" x 7" (2 x 20 cm) 1,000 per roll  
1-9 rolls \$17.95 per roll  
10-24 rolls \$16.25 per roll

3. Aluminum tags 3/4" x 3-1/2" (2 x 8.8 cm) with cardboard backing attached by 9" long copper wire; used for stems up to 2-1/2" (6.5 cm) diam. Available at Forestry Supply (see above).

- #79201; 500 tags \$24.75  
1,000 or more tags \$21.80 per 500

4. Plastic tags with wire fastener 3/4" x 3-1/2" (2 x 8.8 cm) available at A. H.

Hummert Seed Co. (see above).  
 #49-0423; 1,000 tags \$12.95  
 2,000 or more tags \$11.60 per  
 1,000

5. Tapewriting devices. Available at  
 Forestry Supply Inc. (see above).

- a) Touch Action Tapewriter (for  
 vinyl tape only) uses 1/2" and  
 3/8" Dymo tape; inter-  
 changeable embossing wheels  
 #83116 \$37.50
- b) 1011 Tapewriter Kit (for metal  
 or vinyl tapes) #83024 \$116.85

Fairchild Trop. Gardens

D. Prudhomme



*Anthurium helleborifolium* (L.) Schott

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Josef Bogner has pointed out errors in the profile of Engler. The name Adolf (German spelling) should be used rather than Adolph (English spelling). Schott's initials should be H. W. rather than H. C. (the latter a Latinized version of his name). The earliest Engler publication was in 1876, not 1878.