The Arboretum's Labels:
A Valuable Teaching Aid

The living collections of the Arnold Arboretum are used by visitors for diverse purposes which range from sheer enjoyment to serious study. An understanding of the labeling system can greatly increase the pleasures and benefits to be derived, for we try to keep every shrub and tree accurately identified, and to include such other information as may be pertinent. Sometimes this additional data recalls a tale of adventure harking back to the earliest plant explorations, or attests to a nearly extinct species.

Starting down the meadow road, one is immediately aware of the large metal trunk labels found on most mature trees. These labels provide us with the scientific name (Latin name), common name, and native land of the specimen. The metal stand labels used in the shrub collection, on low shrubs, and in many specialized plantings give the same information.

To understand the Latin nomenclature one must have an idea of how the system of plant classification works. The entire plant kingdom has been divided into distinct groups called families; each of these, in turn is divided into subgroups called genera. A genus often contains many species, and a species may be further differentiated by varietal or cultivar names. A family has some characteristic (or characteristics) which allow it to be separated from all other families. Likewise all genera within a family (and all species within each genus) are differentiated from each other by distinguishing traits.

The working of this step-down classification system is similar to the relationship between the following pairs of words: Tool, saw, and keyhole saw. The general denomination tool refers to a large number of items; in order to be more exact, we refer to a certain type of tools as saws, having a more restricted definition. Finally, we have a keyhole saw, referring to a specific type of saw (or perhaps we will have to be even more exact — a red keyhole saw).

In the same way, the more completely a plant is named, the
more exacting are the characteristics by which it is defined. It is useful to note here the differences between a cultivar and a variety. A variety is a population of plants which occurs naturally in the wild, which is slightly different from the rest of the species but not enough so to be considered a species itself. Cultivars, on the other hand, are plants which come from an individual variant of a species that has been propagated, generally to maintain a particular characteristic. A cultivar name is always enclosed in single quotation marks.

A common name also is often noted on the labels but this is a very inaccurate index since the same plant may have many different names in different countries throughout the world. Paradoxically, the same common name is sometimes given to several different plants. Common names are provided primarily for public interest and play no real part in the Arboretum's work.

If a plant originates from one particular area of the world, occurring naturally in the wild, we try to note this on the label also. For example it is fascinating to observe all the kinds that have come from the Orient and which do so well in our New England climate.

Wooden labels which hang from a branch or limb are placed on smaller trees and most shrubs. There also are plastic engraved labels in several specialized collections. These generally provide the same information as the trunk labels but also may carry additional notations which will help us in knowing a plant more completely. The lilac collection often has notes as 'One of the best early magenta varieties', and the tree peony collection has all the Japanese names translated into English ('Tatioshishi' means 'Lion with a Standing Tail' for example).

In addition to the various display labels which I have just mentioned, small metal labels are placed on every specimen. These hold the key to understanding the Arboretum's living collection in depth. In the three lines of print that the typewriter-like machine (called an addressograph) can emboss on the zinc tape, we concentrate the accession number and year of accession, scientific name, propagation technique, and source from whence the plant came. Except in the case of large mass plantings of one type of plant, each tree and shrub should have one of these tags; unfortunately this is not always possible what with the ravages of Mother Nature and the increasing amount of vandalism.

In the collection we do not limit ourselves just to the name of the plant for identification, but have a numbering system
so each can be treated as an individual. Upon arrival at the Arboretum every plant (or seed, cutting, etc.) is given a number which is known as its accession number. For the first 45 years plants were numbered sequentially from 1 (the first plant) to 23000; in 1917 the accessioning system was changed to a number-year unit. Thus the number 443-26 would be the 443rd plant (or group of plants) received in 1926. If more than one plant is covered by the accession number, then the individual plants are designated by letters which come after the number. In the case of the Stewartia in the illustration we find that plant 11440-A is located in a specific spot on the map 11a, whereas its brother plant 11440-B is found elsewhere on the grounds.

Following the scientific name is an abbreviation which tells how the specimen was received, and from this we can tell how it was propagated. The following abbreviations are the most commonly used:

<table>
<thead>
<tr>
<th>Abbreviation</th>
<th>Description</th>
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<tbody>
<tr>
<td>sd</td>
<td>germinated from seeds</td>
</tr>
<tr>
<td>sdlg</td>
<td>plants collected or received as seedlings</td>
</tr>
<tr>
<td>ct or rc</td>
<td>a rooted cutting</td>
</tr>
<tr>
<td>gr or sc</td>
<td>a grafted plant</td>
</tr>
<tr>
<td>rtc or rp</td>
<td>plants propagated from root cuttings</td>
</tr>
<tr>
<td>lyr</td>
<td>plants propagated by layering</td>
</tr>
<tr>
<td>bd</td>
<td>plants propagated by budding (a type of grafting)</td>
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</table>
These notations are important for our field work. The pruners must know if a plant has been grafted, for they need to remove any suckers from below the graft union so that the understock does not take over the named plant. Also any plants that are grown from seeds or seedlings must be checked before they are put on the grounds. This is necessary because a seed may be a hybrid and one often cannot tell until the plant is a good size if it is true to its parent.

Always of interest is the plant’s source which also is noted on the tag. The Arboretum receives plants, seeds, and cuttings from other arboreta, nurseries, botanical gardens, and individuals from all over the world, and from expeditions into remote areas by famous explorers like Wilson and Rock. The metal labels shown above, for example, identify plants which were found in the Orient by the Arboretum sponsored expeditions and were the first of their variety in the United States. If a plant is derived from another plant already in the collection, the parent plant’s accession number is given. If a plant comes from outside of the U.S., the country of origin is noted on the label.

The entire Arboretum is mapped in detail and when a tree or shrub is planted it is immediately added to the maps. This is not only important for quickly locating a given plant, but also to expedite relabeling when a tag is lost or removed. Since most plants of one family or genus are grouped together on the Arboretum grounds, the laborious job of scientifically identifying the specimen in question is thus eliminated.

One of the most important functions of the Arboretum over
the last century has been the introduction of new plants into cultivation in the United States. Many of the most popular and interesting items in the commercial trade were either discovered on plant expeditions or introduced from European or Oriental sources, first into the Arboretum’s collections and then to the public. The grounds have many living specimens which were the first of their name to be grown in the United States. The Paperbark Maple, Dove tree, and Silk tree on Bussey Hill are examples of just such individuals. These plants (and all plants that represent Arboretum introductions) are marked with yellow tags that read ‘Introduced into the U.S. by the Arnold Arboretum’.

Those students of plant history will be especially interested in any plants with a metal tag that simply says ‘Type’. In horticulture and taxonomy the process of designating a plant as a new and distinct entity requires publication of a complete description in the literature (as in Arnoldia for example). The individual tree or shrub on which this description is based is called the ‘Type Plant’. The Arboretum has many of these specimens and also many accessions that are cuttings from ‘Type’ plants and therefore carry the same characteristics. Around the Administration Building are located Magnolia ‘Merrill’, Hamamelis ‘Arnold Promise’, Magnolia stellata ‘Centennial’, and Hamamelis vernalis, all of which are original ‘Type plants’.

After one has obtained all the information from the tags that seems to suit his needs, it also would be wise to step back three or four paces and take a look at the sort of micro-climate in which the specimen has been planted. When plants are moved from the nurseries to the permanent collections they are always placed with an eye toward creating a beautiful display; but at the same time each plant is put in a spot where the horticulturists think it will find positive growing conditions.

An understanding of the Arboretum’s labeling system permits a self-guided tour of the living collections, preferably with notebook as well as camera in hand. Each visitor then has the opportunity to increase his knowledge as fully as his interests lead him, for the library, herbarium, and staff members also are available as further resources.

Jack Link