

CHECKLIST OF CULTIVATED MAPLES

II. *Acer saccharum* Marshall.

by Frank S. Santamour, Jr. and Alice Jacot McArdle

The currently accepted scientific name of sugar maple is *Acer saccharum* Marshall (Arbust. Amer., 1785, p. 4) even though the name may have originated as a misspelling or orthographical error of *A. saccharinum* as used by Miller in 1786 for sugar maple. Wangenheim proposed *A. saccharinum* as a valid name in 1787, but this name had been used for silver maple by Linnaeus in 1753. The epithet *A. saccharophorum* (K. Koch in 1853) never was widely accepted. Many geographical and morphological variants of sugar maple have been given species status, such as *A. leucoderme* Small and *A. nigrum* Michaux f. These were reduced to subspecific status by Desmarais (Brittonia 7: 347-387, 1952). Therefore, cultivar names assigned to species or hybrids now considered subspecies are treated under *A. saccharum*. We do not currently agree with the placement of *A. grandidentatum* Nuttall in the *A. saccharum* complex. Taxonomy is not chiseled in stone, and new discoveries may alter the presently accepted classification scheme.

As before, **VALID CULTIVAR** names are shown in boldface capitals and **INVALID CULTIVAR** names are shown in lightface capitals.

The U.S. National Arboretum assumed the temporary International Registration Authority for unassigned plant genera, including most landscape trees, on January 1, 1981. We have accepted, as part of this authority, the responsibility to provide suitable checklists of cultivars of important landscape tree species and genera. The first of these checklists (Santamour and McArdle 1982) was prepared for *Acer rubrum* L. (red maple).

As stated in the introduction to the red maple checklist, the determination of proper nomenclature is based on the provisions of the International Code of Nomenclature of Cultivated Plants (Brickell *et al.* 1980). Much of the other information in that introduction is pertinent to this checklist also, and it should be consulted for general information.

We have tried to make this checklist as complete and as accurate as possible, and have enlisted the assistance of numerous reviewers at various stages in the preparation of the manuscript. However, we also recognize the difficulties inherent in this work and ask any readers with new information or verified corrections to contact the senior author at the U.S. National Arboretum, Washington, D.C., 20002. We also urge all who may contemplate the introduction of a new tree cultivar to contact Dr. T.R. Dudley at the U.S. National Arboretum for registration forms and other information.

ALTON OGDEN (E.H. Scanlon, Trees Mag. 11(5): 10-11, 22-23, 1951) — named but not described here but referred to as "lyre shaped" in Trees Mag. 12(1): 3. Named for Alton Ogden of Flint, Michigan.

ARROWHEAD (Schichtel's Nurs., Orchard Park, New York, Cat. 1979, p. 18) — upright, pyramidal head with a strong central leader and dense branching, orange to red leaf color in autumn.

BLUE (H.P. Kelsey and W.A. Dayton, Standardized Plant Names, 1942, p. 5) — a probable selection from *A. saccharum* f. *glaucum* (Schmidt) Pax with leaves glaucous beneath. The name is considered to be valid because it was designated as a clone.

BONFIRE (Princeton Nurs., Princeton, New Jersey, Wholesale Price List, Fall 1977-Spring 1978, p. 10) — vigorous grower with brilliant carmine red autumn color. Plant Patent No. 3817, December 16, 1975. A selected seedling from open-pollinated seeds of *A. saccharum* "columnare"; broad oval shape.

CARY (Anon., AABGA Bull. 9(2): 44-47, 1975) — shorter, more compact, with denser, longer lasting foliage, slower growing than 'Newton Sentry' or 'Temple's Upright'; different habit, narrow bell-shaped; leaves one-half the size of associated maples; branches spreading at about 45-degree angle. Anon., AABGA Bull. 10(1): 27, 1976 — tree discovered by J.W. Ploetz near Millbrook, New York, now the site of the Cary Arboretum of the New York Botanical Garden. Named for Mary Flagler Cary and introduced by the Brooklyn Botanic Garden. Plant Patent No. 2581, December 28, 1965.

COLEMAN (B.O. Mulligan, Maples cultivated in the United States and Canada, Amer. Assoc. Bot. Gard. & Arbor., 1958, 58 p.) — without description. D. Wyman in Amer. Nurseryman 110(7): 10-11, 88-94, 1959, stated that it was a broad columnar type with a 12- to 14-foot branch spread at 35 to 40 feet in height. Original tree on Lyn Avenue, Lake City, Minnesota, and selected by R. Nordine.

- COLUMNARE** (F.L. Temple, Shady Hill Nurs., Cambridge, Massachusetts, Cat. 1885-1886) — as *Acer saccharinum* columnare, using an incorrect Latin species epithet as an accepted scientific name for sugar maple. Original tree in yard of Clafin Grammar School, Newton, Massachusetts and later moved to Newton cemetery. History given by B. Harkness, *Baileya* 2: 99-102. = **NEWTON SENTRY**.
- COMMEMORATION** (Moller's Nurs. Inc., Gresham, Oregon, Wholesale Price List, Fall 1981-Spring 1982, p. 25) — Rapid, vigorous grower, achieving saleable size at an early age, densely branched crown. Tree selected by W.N. Wandell, Urbana, Illinois.
- CONIC** (H.P. Kelsey and W.A. Dayton, Standardized Plant Names, 1942, p. 5) = **CONICUM**.
- CONICUM** (M.L. Fernald, *Rhodora* 36: 238-239, 1934) — as *Acer saccharum* f. *conicum*. Tree found near North Woodstock, New Hampshire, densely conical form, propagated but apparently not widely distributed.
- CUTLEAF** = **SWEET SHADOW CUT-LEAF**.
- DAWES** — Name found in records of Plant Sciences Data Center of the American Horticultural Society. Tree growing at Dawes Arboretum, Newark, Ohio, and noted for clear yellow autumn leaves ca. 1965, but not propagated or distributed.
- FAIRVIEW** (A. McGill & Son, Fairview, Oregon, Wholesale Price List, Fall 1975-Spring 1976, p. 15 — Trade-marked) — strong, sturdy habit of growth, requiring little or no staking as a 2-year-old tree; leaves of emerald green color and bark is much lighter than other sugar maples.
- FLOWER** (B.O. Mulligan, Maples cultivated in the United States and Canada, *Amer. Assoc. Bot. Gard. & Arbor.*, 1958, 56 p.) — without description. Described by D. Wyman in *Amer. Nurseryman* 110(7): 10-11, 88-94, 1959 as a narrow type found in Manchester, Vermont. Original tree probably cultivated on property of H.C. Flower.
- GLOBE** = **GLOBOSUM**.
- GLOBOSUM** (Kingsville Nurs., Kingsville, Maryland, Cat. 1947, p. 5) — "rare globe form of sugar maple, being broader than tall", rich golden-red autumn leaves. Listed as AAN Register 46 'Globe' in *Woody Plant Register*, List No. 1, American Association of Nurserymen, Inc., 1949, p. 2. Original tree found by La Bar's Rhododendron Nursery near Stroudsburg, Pennsylvania — registered and introduced by H.J. Hohman, Kingsville Nurs.
- GOLDSPIRE** (Princeton Nurs., Princeton, New Jersey, Wholesale Price List, Fall 1973-1974, p. 10) — densely columnar with a broader crown than that of 'Newton Sentry', gold autumn leaf color. Plant Patent No. 2917, August 12, 1969. Originated as a cross between *A. saccharum* "Monumentale" and *A. saccharum* "Columnare"; compact, rectangular crown, foliage resistant to physiological leaf scorch, orange autumn color.
- GREENCOLUMN** (J. Frank Schmidt & Son Co., Boring, Oregon, Wholesale Price List, Fall 1977-Spring 1978, p. 23) — as *Acer nigrum* 'Greencolumn'. A medium-large tree with deeply furrowed bark and 3- to 5-lobed dull green leaves turning gold to apricot and orange-red in autumn. A selection by W.R. Heard, Des Moines, Iowa. Plant Patent No. 3722, May 27, 1975. Tall, broadly columnar form with rounded crown at top. Leaves somewhat pubescent underside.
- GREEN MOUNTAIN** (Princeton Nurs., Princeton, New Jersey, Wholesale Price List, Fall 1964-Spring 1965, p. 11) — "upright oval crown of dark green foliage which turns orange and scarlet shades in the fall", leaves have more than twice thickness of waxy protective coating as do typical sugar maples. Plant Patent No. 2339, January 7, 1964.
- LACINIATA** (Powell Valley Nurs., Gresham, Oregon, Wholesale Price List 1961-62, p. 10) — described as cutleaf, patent applied for. Name invalid because in Latin form and published after January 1, 1959. = **SWEET SHADOW CUT-LEAF**.
- LANCO COLUMNAR** (The Siebenthaler Co., Dayton, Ohio, Trade List, Fall-Winter 1981, p. 4) — good uniformity, excellent fall color, no summer scorch or frost cracking. Plant Patent No. 4654, February 24, 1981. Broad columnar form, healthier appearance late in season due to less scorching of the leaves.
- LEGACY** (Moller's Nurs. Inc., Gresham, Oregon, Wholesale Price List, Fall 1981-Spring 1982, p. 26) — very vigorous spreading habit, heavily branched, orange-red autumn foliage color, thick leaves resistant to leaf tatter common in sugar maples. Tree selected by W.N. Wandell, Urbana, Illinois. Fall color predominantly red, but with shades of pink, orange and yellow.
- MONSTROSUM** (Raraflora, Feasterville, Pennsylvania, Cat. 1962, p. 11) — invalid for lack of description.
- MONUMENTAL** (Ellwanger & Barry — Mount Hope Nurs., Rochester, New York, Supplementary Catalogue of Rare and Choice Trees, Shrubs and Roses, 1893, p. 10) — as *Acer saccharinum monumentalis*, using an incorrect Latin species epithet as an accepted scientific name for sugar maple; "pyramidal compact habit, the foliage of the second growth is of a brilliant crimson, which, contrasted with the rich green of the older foliage, produces a charming effect."
- MONUMENTALE** (F.L. Temple, Shady Hill Nurs., Cambridge, Massachusetts, Cat. 1887-1888) — as *Acer saccharinum monumentale*, using an incorrect Latin species epithet as an accepted scientific name for sugar maple = **TEMPLE'S UPRIGHT**.
- MORAINE** (The Siebenthaler Co., Dayton, Ohio, Trade List, Fall-Winter 1981, p. 4) — outstanding fall color, fast growing. No summer scorch or frost cracking. Plant Patent No. 4534, May 13, 1980. Rapid growth, conical form, foliage mottled gold, orange and scarlet in autumn, turning to blood red. Hardy to -21°F.
- NEWTON SENTRY** (B. Harkness, *Baileya* 2: 99-102, 1954) — Harkness proposed this name to replace Temple's 'Columnare', which had been widely confused with Temple's 'Monumentale' in the nursery trade. Unfortunately, Sentry' and 'Temple's Upright', combined features of both cultivars under the description of each. Proper descriptions of both cultivars are provided in B. Harkness, *Phytologia* 5: 233-256, 1955. Few ascending branches, with strong central leader and stubby lateral branches; leaves dark green and leathery in texture, margins wavy.
- PYRAMIDAL** (H.P. Kelsey and W.A. Dayton, Standardized Plant Names, 1942, p. 4-5) — supposed to be synonymous with "pyramidale" but the latter name had not been previously used in sugar maple. The English name, however, is considered to be valid because it was designated as a clone, even though no description was

provided.

SANBORN = **SANDBORN**.

SANDBORN (B.O. Mulligan, *Maples cultivated in the United States and Canada*, Amer. Assoc. Bot. Gard. & Arbor., 1958, 56 p.) — without description. Described (as 'Sanborn') by D. Wyman in Amer. Nurseryman 110(7): 10-11, 88-94, 1959, as narrow columnar, with a 6- to 7-foot branch spread, 30 feet high. Original tree probably cultivated on property of Mrs. E.R. Sandborn, Concord, New Hampshire.

SENECA CHIEF (Schichtel's Nurs., Orchard Park, New York, Cat. 1979, p. 19) — narrow, oval crown with dense branching, yellow to orange autumn leaf color.

SENECAENSE — A.E. Murray, Jr., A monograph of the Aceraceae, Ph.D. Thesis, Penna. State Univ., 332 p. changed "senecaensis" to 'Senecaense' because of improper Latin ending and considered the name as a cultivar because Slavin originally described only one of several so-called hybrids. See **SENECAENSIS**.

SENECAENSIS (B.H. Slavin, Nat'l Hort. Mag. 29: 103-107, 1950) — as *X Acer senecaensis*, a garden-origin hybrid (ca. 1919) between *Acer leucoderme* Small and *A. saccharum* that originated at Durand Eastman Park, Rochester, New York. Hybrids arising in cultivation between varieties or subspecies of a species should not be given Latin hybrid epithets. = **SENECAENSE**.

SENTRY (H.P. Kelsey and W.A. Dayton, Standardized Plant Names, p. 5, 1942) — Name applied to 'Monumentale' of Temple but would, more appropriately, apply to Temple's 'Columnare'. = **NEWTON SENTRY**.

SLAVIN'S UPRIGHT (B. Harkness, Phytologia 5: 233-256, 1955) — as a selection of *Acer nigrum* f. *ascendens* (*forma nova*). Tree previously described, without name, by B.H. Slavin, Nat'l. Hort. Mag. 29: 103, 1950, as a distinctly upright form, having strongly ascending branches, thus giving the whole tree a columnar outline. Selected as a seedling from parent tree located near Salamanca, New York.

SWEET SHADOW CUT-LEAF (Powell Valley Nurs., Gresham, Oregon, Wholesale Price List, 1963-64, p. 13) — Plant Patent No. 2139, April 24, 1962. Leaves dissected to lacerated.

SWEET SHADOW CUTLEAF (Moller's Nurs., Gresham, Oregon, Wholesale Price List, Fall 1964-Spring 1965, p. 7) — name invalid because spelling change can only be made by the introducer or with his permission.

SWEET SHADOW CUT LEAF — Name invalid because cultivar names must be limited to three elements.

TEMPLE'S UPRIGHT (B. Harkness, *Baileya* 2: 99-102, 1954) — Harkness proposed this name to replace Temple's 'Monumentale', which had been widely confused with Temple's 'Columnare' in the nursery trade. Unfortunately, Harkness, in distinguishing the illustrations of 'Temple's Upright' and 'Newton Sentry' combined features of both cultivars under the description of each. Proper descriptions of both cultivars are provided in B. Harkness, *Phytologia* 5: 233-256, 1955. Many ascending branches, with no dominant central leader; leaves yellow-green, not leathery, margins plane (sic).

Other Cultivars

There is still one very large group of *validly published* cultivar names that must be dealt with.

They are not included in the general listing because, to our knowledge, they are not available commercially and perhaps never will be. They are mentioned here in order to present as complete a picture as possible and also to serve as an example of the nomenclatural difficulties that may be brought about by "premature" and overly extensive application of cultivar names.

In 1968, the Province of Ontario, Canada, initiated a program of selection of potentially superior urban landscape trees from native stands of sugar maple in the Province. The selections embraced all of the major site regions in the Province and were based mainly on crown shape and branching habit. Rather than refer to the selected trees by code numbers, the leaders of this endeavor chose to designate each selection with a cultivar name, in accordance with the provisions of the Code. Usually this name referred to the town closest to the tree's origin, sometimes followed by a numeral, as part of the name, if there were more than one selection in a particular area. Descriptions of the various cultivars were presented in tabular form and pertained to the shape, density, and branch angle of the crown. Estimated height and age of the original tree were also given.

Of the 257 valid cultivar names presented by Morsink and Jorgensen (1974), we have only listed the 51 cultivars that had actually been vegetatively propagated at the time of their publication. These are listed below:

AGAWA	INGERSOLL
AMULREE 1	KETTLEBY
AUBURN 2	KIRKWALL 1
BALLANTRAE 1	KIRKWALL 2
BLANTYRE 1	MIDDLEMISS
CAMPBELLFORD 1	MIDHURST
CAMPBELLFORD 2	MONO MILLS 1
CENTREVILLE 3	MONO MILLS 2
CHRISTINA 1	MORGANSTON
CHRISTINA 6	MORTON
CHRISTINA 7	MT. ALBERT 2
CRAIGHURST 2	NORTHLAND 1
CROSBY	PARIS
DELTA	PARKHILL 1
DESBORO	PLATTSVILLE 1
EDGAR 1	PRINCETON 2
GARDEN HILL 1	ROESMONT 2
GOODWOOD 1	SELBY
GOODWOOD 2	SPRINGBANK 1
GROVETON 4	THAMESFORD 5
HARROWSMITH 1	THAMESFORD 8
HARROWSMITH 2	THAMESFORD 9

HILLSBURGH 1
HILTON BEACH 1
HILTON BEACH 2
HOPEVILLE 2

UXBRIDGE 2
WELLESLEY 1
WELLESLEY 2

It is obvious that among these 51 names, and the remaining 206 cultivars listed by Morsink and Jorgensen (but not published here), that there are many English "place" and "people" names that might well be proposed as cultivar names by other persons in the future. According to the Code, these names have *priority* and no other cultivars may be designated by the same name or a name so similar as to cause confusion in practice.

The actual existence and potential future of the Ontario cultivars is somewhat in question. In a recent conversation with the senior author, Prof. Jorgensen expressed the belief that none of these cultivars would become items of commerce. Re-use of cultivar names is governed by Article 48 of the Code, and the validity of such use is determined by the International Registration Authority, currently the U.S. National Arboretum.

Nurserymen, horticulturists, or research scientists wishing to name a new cultivar of sugar maple would do well to review Morsink and Jorgensen (1974) or consult the Arboretum for guidance.

Literature Cited

- Brickell, C.D., A.F. Kelly, F. Schneider, and E.G. Voss. 1980. International code of nomenclature for cultivated plants — 1980, *Regnum Vegetabile* Vol. 104, 32 p.
- Morsink, W.A.G. and E. Jorgensen. 1974. Propagation and selection of sugar maple (*Acer saccharum* Marsh.) in Ontario. *Ont. Minis. Nat. Res.*, 21 p.
- Santamour, Frank S., Jr. and Alice Jacot McArdle. 1982. *Checklist of cultivated maples. I. Acer rubrum L.*, *Jour. Arboric.* 8: 110-112.

*Research Geneticist and Biological Technician,
respectively
U.S. National Arboretum
Agricultural Research Service
U.S. Department of Agriculture
Washington, D.C.*

ABSTRACTS

LYNCH, J.A. 1981. **Know your winter trees.** *Am. Forests* 87(2): 11-17.

In summer, nature makes identification easy, outfitting each tree with its own distinctive leaves, but in winter the trees are stripped and we must look for other traits. A favorite image of winter's deciduous trees must certainly be the silhouette, that bare outline against the sky that reveals identity through the pattern of trunk and branches. Winter trees hold many secrets, but some of the mysteries can be unraveled by simple outdoor detective work. Silhouettes are useful, of course, for trees that are free-standing; but bark, twigs, leaf scars, winter buds, over-wintering fruit, seed pods, habitat, and geographical range should also be noted.

GREY, G.W. et al. 1981. **Urban forestry.** *Landscape and Turf* 25(7): 12-13.

Foresters have long been involved with city trees: some formally as city foresters, and many informally as interested citizens. It was not until the late 1960s, however, that the concept of urban forestry began to emerge strongly. During the 1970s the number of foresters working in urban situations increased significantly. In just a decade, the field has gained greatly in scope and acceptance. Conventional foresters are limited in urban environment, however, unless they also have an appreciation and working knowledge of other disciplines. To the solid base of traditional forestry must be added training in such areas as landscape design, arboriculture, turf management, urban planning, and public finance. Indeed, most foresters currently working in urban areas have supplemental formal or informal training in many of these areas.