CULTIVARS IN THE GENUS CHAENOMELES

Claude Weber

The genus Chaenomeles includes the plants commonly known as Japanese or Flowering Quinces, or Japonicas. They are shrubs with bright and showy flowers, blooming normally in the early spring, before the leaves come out, at a time when few other flowers are available in the garden. For this reason, the Flowering Quinces have been popular ever since the first species was introduced to European gardens at the end of the eighteenth century.

Before its introduction into Europe, the botanist Thunberg had seen a Flowering Quince growing in Japan. He thought it was a new kind of pear tree, and described it, in 1784, as Pyrus japonica. A few years later, in 1796, Sir Joseph Banks, director of the Royal Botanic Gardens, Kew, introduced the first Japanese Quince into England, assuming it was Thunberg's species. In 1807, Persoon recognized that because of its numerous seeds this species did not belong to the genus Pyrus, but rather to Cydonia, the common Quince. The plant therefore became known as Cydonia japonica (Thunb.) Pers.

In 1822 Lindley established the genus Chaenomeles, distinguishing it from Cydonia primarily by the character of the fruits. Subsequent observations and studies have confirmed Lindley's opinion, yet some nurserymen still continue to list the species of Chaenomeles under Cydonia. Chaenomeles possesses reniform stipules; short, entire, glandless sepals erect at anthesis; stamens in two rows; completely fused carpels; and styles fused at the base forming a column. Cydonia has linear stipules; foliaceous and serrate sepals bordered with glands; stamens in one row; carpels fused by the adaxial side only; and styles free or coalescent by the pubescence only.

About 1870, the Messrs. Maule, nurserymen in Bristol, England, introduced a
second species of Flowering Quince from Japan, which Masters described as *Pyrus maulei*. Years later, however, botanists discovered that this species was the real *Pyrus japonica* of Thunberg. It is a dwarf plant with small crenate leaves and flowers salmon-orange in color. Its correct name is *Chaenomeles japonica* (Thunb.) Lindl. ex Spach, and *Chaenomeles ‘Maulei’* is a cultivar representing the strain introduced by the Maules into Europe.

The species which was first introduced to Europe by Banks is native in China. Banks found it in Japan where it was under cultivation. This plant is an upright shrub with serrate leaves and normally red flowers, quite different indeed from Thunberg’s plant. In 1815, Loiseleur Deslongchamps became aware of the existence of two kinds of shrubs under the name of *Pyrus (Cydonia) japonica*. He proposed a new name for the Chinese plant, *Cydonia lagenaria*. Unfortunately, in his description of the species, he included Thunberg’s *Pyrus japonica* as a synonym. As a result, *Cydonia lagenaria* is a superfluous name according to the International Code of Botanical Nomenclature. The correct name for what is commonly known in cultivation as *C. lagenaria* is *Chaenomeles speciosa* (Sweet) Nakai based on Sweet’s *Cydonia speciosa*.

The third species included in the genus *Chaenomeles* is *C. cathayensis* (Hemsley) Schneider. Its introduction from China to Europe passed unnoticed because, like *C. japonica*, it arrived incorrectly identified. At the time of its introduction it was thought to be *Cydonia sinensis* (DuMont de Coursset) Thouin. *Chaenomeles cathayensis* is a shrub with straight, erect branches with numerous strong thorns, long, serrate leaves, and white flowers suffused with pink. *Cydonia sinensis* is a tree, absolutely thornless, with round, glandular leaves and pink flowers. In 1901, when the identity of the introduction was established and it was described as *C. cathayensis*, it had been growing for some twenty years at the Royal Botanic Gardens at Kew. Research, mostly on herbarium specimens, suggested that *C. cathayensis* was only a variety of *C. speciosa*. Subsequent observations and studies of living material, however, confirmed the initial consideration that *C. cathayensis* is sufficiently distinct from *C. speciosa* to merit specific status.

*Cydonia sinensis* was transferred by Koehne to *Chaenomeles* as *C. chinensis* Koehne, because he thought that the styles were fused at the base. The change in spelling of the specific epithet and the assumption that the styles are fused are incorrect. The proper position of this species, therefore, is in *Cydonia*.

The genus *Chaenomeles* now includes three species, *C. cathayensis*, *C. japonica*, and *C. speciosa*. Hybrids have been developed among them in every combination. *Chaenomeles × superba* (Frahm) Rehder is a chance hybrid between *C. japonica* and *C. speciosa*. This hybrid appeared naturally in different nurseries about 1898, but was considered at the time to be only a variety of *C. maulei*. The next hybrids, produced artificially, are the famous “Cathayensis Hybrids.” *Chaenomeles cathayensis × speciosa* was raised by De Vilmorin, in France, and named *C. hybrida vederariensis*. This is now considered to be the first cultivar in the VILMORINIANA group. W. B. Clarke, of San Jose, California, crossed *C. japonica* with *C. cathayensis*. The result of this cross gave rise to the first cultivar, ‘Cynthia’, in the
CLARKIANA group. Clarke also crossed C. × superba 'Corallina' with C. cathayensis, producing what is called the CALIFORNICA group in which all three species are involved. The genetic recombination and the segregation of characters in the first and second generation of this latter cross supply the basis for many of the cultivars developed by Clarke. Some of these hybrids have backcrossed to the parental species causing some of the confusion which makes it difficult to determine to which species or hybrid group a given cultivar belongs.

The compilation of the material which follows was begun at the Arnold Arboretum under the program of the American Association of Botanical Gardens and Arboreta, authorized by the American Horticultural Society and the International Committee of Plant Registration. At the XVIth International Horticultural Congress held in Belgium in 1962, the Arnold Arboretum was designated as the International Registration Authority for the genus Chaenomeles, and this list is, therefore, offered as an International Registration list of cultivars.

The lists presented in the following pages are fully explained at the beginning of each of them. It is sufficient to say here that the first comprises an alphabetical arrangement of all names which have been applied to Japanese Quinces and the species or hybrid group of which each is a member; the second is an arrangement of cultivar names under the species or hybrid group to which each belongs; and the third is a grouping of names of living cultivars by their color classes.

Further information and corrections, as well as any additions to these lists, will be greatly appreciated. I wish to express here my sincere thanks to the numerous persons who have contributed information, fresh material, or herbarium specimens. Without their whole-hearted help, the completion of this study would have been impossible.

I. LIST OF ALL KNOWN CULTIVAR NAMES

This list is a compilation (in alphabetical order) of all names, which have been applied to Japanese Quince, including those illegitimate according either to the International Code of Botanical Nomenclature or to the International Code of Nomenclature for Cultivated Plants. Included also are those names still un-published but currently in use in botanical gardens. Each cultivar name is followed by the name (in parentheses) of the species or hybrid group to which the cultivar belongs (this name is printed in SMALL CAPITALS). A question mark (?) indicates that the species or hybrid group could not be verified because of lack of material. Cultivar names which are synonyms are indicated by italic type in accordance with a recent ruling for registration lists. An asterisk (*) preceding a cultivar name indicates that the cultivar is currently grown in the United States and available from nurseries, botanical gardens, and arboreta. A dagger (+) preceding a cultivar name indicates that the cultivar is thought to be extinct.

'Abricot' (× superba)  'Akebono' (?)
* 'Afterglow' (× superba)  * 'Alarm' (speciosa)
* 'Afterglow' (× vilmoriniana)  'Alba' (japonica)
† 'Alba' (SPECIOSA)
♦ 'Alba' (SPECIOSA)
♦ 'Alba' (× SUPERBA)
♦ 'Alba Candida' (SPECIOSA)
♦ 'Alba Cincta' (SPECIOSA)
† 'Alba Cincta Plena' (prob. SPECIOSA)
♦ 'Alba Cintra' (SPECIOSA)
♦ 'Alba Cintra Plena' (prob. SPECIOSA)
♦ 'Alba Floribunda' (SPECIOSA)
† 'Alba Grandiflora' (SPECIOSA)
† 'Alba Grandiflora Carrieri' (SPECIOSA)
♦ 'Alba Grandiflora Plena' (SPECIOSA)
† 'Alba Odorans' (SPECIOSA)
♦ 'Alba Picta' (SPECIOSA)
♦ 'Alba Plena' (SPECIOSA)
♦ 'Alba Punctata Rosea' (SPECIOSA)
♦ 'Alba Rosea' (SPECIOSA)
♦ 'Alba Semiplena' (SPECIOSA)
† 'Alba Simplex' (prob. SPECIOSA)
† 'Alba Variegata' (prob. SPECIOSA)
♦ 'Albicans' (SPECIOSA)
♦ 'Albiflora' (SPECIOSA)
† 'Albipicta' (SPECIOSA)
♦ 'Albo-cincta' (SPECIOSA)
♦ 'Albo-lineata' (?)
† 'Albo-picta' (SPECIOSA)
♦ 'Albo-rosea' (SPECIOSA)
Var. alpina (JAPONICA)
♦ 'Alpina' (JAPONICA)
♦ 'Alpina' (SPECIOSA)
♦ 'Alpina Naranja' (× SUPERBA)
'Andenken an Carl Ramcke' (× SUPERBA)
♦ 'Andenken an Ernst Finken' (× SUPERBA)
'Andenken an Karl Ramcke' (× SUPERBA)
'Angustifolia' (SPECIOSA)
♦ 'Apple Blossom' (SPECIOSA)
♦ 'Apple Blossom Pink' (SPECIOSA)
'Apricot' (× SUPERBA)
† 'Argentea'? (?)
♦ 'Arthur Colby' (× CALIFORNICA)
♦ 'Arthur Hill' (JAPONICA)
† 'Atrocaulis'? (?)
♦ 'Atrococcinea' (SPECIOSA)
♦ 'Atrococcinea Flore Pleno' (SPECIOSA)
♦ 'Atrocaulis Plena' (SPECIOSA)
† 'Atrococcinea Semi-plena' (prob. SPECIOSA)
♦ 'Atropurpurea' (SPECIOSA)
♦ 'Atrosanguinea' (SPECIOSA)
♦ 'Atrosanguinea' (× SUPERBA)
♦ 'Atrosanguinea Flore Plena' (SPECIOSA)
† 'Atrosanguinea Plena' (SPECIOSA)
† 'Aurantiaca' (SPECIOSA)
† 'Aurantiaca Semiplena' (SPECIOSA)
♦ 'Aurea' (JAPONICA)
♦ 'Aurea' (SPECIOSA)
♦ 'Aurora' (SPECIOSA)
♦ 'Aurora' (× CALIFORNICA)
♦ 'Azalea' (prob. × SUPERBA)
♦ 'Baltzii' (SPECIOSA)
♦ 'Benibotan'? (?)
♦ 'Benichidorii' (× SUPERBA)
♦ 'Blood Red' (SPECIOSA)
♦ 'Blush' (SPECIOSA)
♦ 'Blush Japan' (SPECIOSA)
♦ 'Bonfire' (SPECIOSA)
♦ 'Boule de Feu' (SPECIOSA)
♦ 'Boule de Feu' (× SUPERBA)
♦ 'Boule de Fue' (× SUPERBA)
♦ 'Brillant' (SPECIOSA)
♦ 'Brilliant' (SPECIOSA)
† 'Bugeauti' (SPECIOSA)
♦ 'Bunyardii' (× SUPERBA)
♦ 'California' (× CALIFORNICA)
♦ 'California' (× CALIFORNICA)
♦ 'Camellia-Bloemige' (SPECIOSA)
♦ 'Camelliaefolia' (SPECIOSA)
♦ 'Camelliflora' (SPECIOSA)
♦ 'Cameo' (× SUPERBA)
♦ 'Candicans' (SPECIOSA)
♦ 'Candida' (SPECIOSA)
♦ 'Candidissima' (SPECIOSA)
♦ 'Candidissimum' (SPECIOSA)
♦ 'Cardinal' (× CALIFORNICA)
♦ 'Cardinalis' (SPECIOSA)
♦ 'Cardinal Red' (× CALIFORNICA)
♦ 'Carmine Queen'? (?)
♦ 'Carnea' (SPECIOSA)
† 'Carnea Plena' (prob. SPECIOSA)
Var. cathayensis (CATHAYENSIS)
♦ 'Charming' (× SUPERBA)
♦ 'Chosan' (× SUPERBA)
Choshan' (× SUPERBA)
'Choshun' (?)
\* 'Citri-pomma' (SPECIOSA)
\* 'Clark's Giant' (× CALIFORNICA)
\* 'Clarke's Giant Red' (× CALIFORNICA)
\* 'Clayden' (?)
\* 'Coccinea' (SPECIOSA)
\* 'Coccinea Erecta' (SPECIOSA)
\* 'Coccinea Plena' (SPECIOSA)
\* 'Cole's Red' (× SUPERBA)
\* 'Colette' (× SUPERBA)
\* 'Columbia' (× SUPERBA)
\* 'Contorta' (SPECIOSA)
\* 'Coquelicot' (× SUPERBA)
\* 'Coral Beauty' (× SUPERBA)
\* 'Coral Glow' (× SUPERBA)
\* 'Corallina' (× SUPERBA)
\* 'Coral Red' (?)
\* 'Coral Sea' (× SUPERBA)
\* 'Crimson and Gold' (× SUPERBA)
\* 'Crimson and Red' (× SUPERBA)
\* 'Crimson Beauty' (× SUPERBA)
\* 'Crimson King' (× SUPERBA)
\* 'Crippsii' (?)
\* 'Cynthia' (× CLARKIANA)
\* 'Dark Crimson' (SPECIOSA)
\* 'Dawn' (× CALIFORNICA)
\* 'Deep Pink' (SPECIOSA)
\* 'Deep Red' (× CALIFORNICA)
\* 'Deep Salmon' (?)
\* 'Della Robbia' (× SUPERBA)
\* 'Dixie Scarlet' (?)
\* 'Doctor Bang's Pink' (SPECIOSA)
\* 'Dolichocarpa' (prob. SPECIOSA)
\* 'Dorothy Rowe' (JAPONICA)
\* 'Double Flowering' (SPECIOSA)
\* 'Double Orange' (× SUPERBA)
\* 'Double Red' (× SUPERBA)
\* 'Double Scarlet' (SPECIOSA)
\* 'Double Vermilion' (× SUPERBA)
\* 'Dr. Bang's Pink' (SPECIOSA)
\* 'Dwarf Coral' (× SUPERBA)
\* 'Dwarf Orange Red' (?)
\* 'Dwarf Poppy' (JAPONICA)
\* 'Dwarf Poppy Red' (JAPONICA)
\* 'Dwarf Red' (SPECIOSA)
\* 'Dwarf Scarlet' (?)
\* 'Early Apple Blossom' (× SUPERBA)
\* 'Early Orange' (× SUPERBA)
\* 'Eburnea' (SPECIOSA)
\* 'Ecarlate' (× SUPERBA)
\* 'Echo' (SPECIOSA)
\* 'Eclairate' (× SUPERBA)
\* 'Elly Mossel' (× SUPERBA)
\* 'Emilie Souzou' (SPECIOSA)
\* 'Enchantment' (× CALIFORNICA)
\* 'Enchantress' (× CALIFORNICA)
\* 'Ernst Finken' (× SUPERBA)
\* 'Etna' (× SUPERBA)
\* 'Eugenioides' (SPECIOSA)
\* 'Euphrosyne' (SPECIOSA)
\* 'Exilis' (SPECIOSA)
\* 'Eximia' (SPECIOSA)
\* 'Extus' (SPECIOSA)
\* 'Extus Acuminatus' (× SUPERBA)
\* 'Extus Coccinea' (SPECIOSA)
\* 'Falconnet' (SPECIOSA)
\* 'Falconnet Carlet' (SPECIOSA)
\* 'Falconnet Charlet' (SPECIOSA)
\* 'Falconnet Charlot' (SPECIOSA)
\* 'Falconnet Scarlet' (SPECIOSA)
\* 'Fascination' (× SUPERBA)
\* 'Fastigiatum' (SPECIOSA)
\* 'Fire' (× CALIFORNICA)
\* 'Fireball' (SPECIOSA)
\* 'Fire Dance' (× SUPERBA)
\* 'Fire Dancer' (× SUPERBA)
\* 'Flamingo' (× CALIFORNICA)
\* 'Flora Carnea' (SPECIOSA)
\* 'Flore Albo' (SPECIOSA)
\* 'Flore Albo Fructu Odorata' (SPECIOSA)
\* 'Flore Albo Inermis' (SPECIOSA)
\* 'Flore Albo Pleno' (SPECIOSA)
\* 'Flore Albo Semipleno' (SPECIOSA)
\* 'Flore Atrosanguinea' (SPECIOSA)
\* 'Flore Aurantiaca' (SPECIOSA)
\* 'Flore Carnea' (SPECIOSA)
\* 'Flore Kermesina' (SPECIOSA)
\* 'Flore Plena' (SPECIOSA)
\* 'Flore Plena Rosea' (SPECIOSA)
\* 'Flore Purpurea' (SPECIOSA)
"Flore Rosea Plena" (SPECIOSA)
'Flore Roseo' (SPECIOSA)
'Flore Rubra' (SPECIOSA)
'Flore Rubro Aurantiaca' (SPECIOSA)
'Flore Rubro Pleno' (SPECIOSA)
'Flore Semi-pleno' (SPECIOSA)
'Floreubnda' (SPECIOSA)
'Floribus Punicetis' (SPECIOSA)
'Floribus Roseis' (SPECIOSA)
'Foliis Rubris' (× SUPERBA)
'Foliis Variegatis' (SPECIOSA)
'Fructa Odoratissima' (SPECIOSA)
'Fructico Alba' (× SUPERBA)
'Fructicuco Odoratissimo' (SPECIOSA)
'Fructo Alba' (× SUPERBA)
'Fructu Alba' (× SUPERBA)
'Fruitlandi' (× SUPERBA)
'Gandavensis' (SPECIOSA)
'Gaujardii' (SPECIOSA)
'Jane Taudevin' (× SUPERBA)
'Japan Blush' (SPECIOSA)
'Japanese Scarlet' (SPECIOSA)
'Japan White' (SPECIOSA)
'Jet Trail' (× SUPERBA)
'Jimmy's Choice' (SPECIOSA)
'Juliet' (× SUPERBA)
'Kan-Toyo-Nishiki' (SPECIOSA)
'Karl Ramcke' (× SUPERBA)
'Kermesina Semi-plena' (SPECIOSA)
'Kermesina' (SPECIOSA)
'Kermesina Semiplena' (SPECIOSA)
'Kempo' (?)
'Kinshi' (× SUPERBA)
'Knap Hill' (× SUPERBA)
'Knap Hill Radiance' (SPECIOSA)
'Knap Hill Scarlet' (× SUPERBA)
'Knap Hill Seedlings' (prob. × SUPERBA)
'Knap Hill Variety' (× SUPERBA)
'Kogyoku' (?)
'Kokko' (prob. SPECIOSA)
'Kokuko' (prob. SPECIOSA)
'Koshi-no-Homare' (?)
'Koshi-no-Yuki' (?)
'Lady Emily Swartz' (prob. SPECIOSA)

1 The epithet "hybrida" has been used widely and loosely in the horticultural literature concerning the genus Chaenomeles. Many of the plants named as Chaenomeles hybrida are not hybrids. Any attempt to establish the priority of use of this epithet together with an attempt to supply new names for later synonyms would create a great deal of confusion. The rules of nomenclature of cultivated plants seek to establish stability of "cultivar" names and for this reason the epithet hybrida is regarded only as descriptive.
° Var. lagenaria (SPECIOSA)
  'Leichtlinii' (× SUPERBA)
° 'Leonard's Variety' (SPECIOSA)
° 'Leonard's Velvety' (SPECIOSA)
° 'Lewalliensis' (?)
° 'Limonii' (SPECIOSA)
† 'Lutea' (SPECIOSA)
† 'Lutea Macrantha' (SPECIOSA)
  'Lutea Viridis' (SPECIOSA)
° 'Macrantha' (prob. SPECIOSA)
° 'Macrocarpa' (SPECIOSA)
° 'Maerloosi' (SPECIOSA)
° 'Maillardii' (CATHAYENSIS)
° 'Maillardii' (SPECIOSA)
° 'Maillardii' (SPECIOSA)
° 'Mallarot' (SPECIOSA)
° 'Mallordi' (SPECIOSA)
° 'Mallordii' (SPECIOSA)
° 'Mallordi' (SPECIOSA)
° 'Mallordi' (SPECIOSA)
° 'Mallordi' (SPECIOSA)
  'Mallordii' (PROB. SPECIOSA)
° 'Mallordii' (SPECIOSA)
° 'Mallordii' (SPECIOSA)
° 'Mallordii' (SPECIOSA)
° 'Mallordii' (SPECIOSA)
° 'Mallordii' (SPECIOSA)
° 'Mallordii' (SPECIOSA)
° 'Mallordii' (SPECIOSA)
° 'Mallordii' (SPECIOSA)
° 'Mallordii' (SPECIOSA)
° 'Mandarin' (× SUPERBA)
° 'Margaret Adams' (× SUPERBA)
° 'Marmorata' (SPECIOSA)
° 'Masterpiece' (× CALIFORNICA)
° 'Maulei' (JAPONICA)
° 'Maulei Seedlings' (prob. JAPONICA)
° 'Mawlei' (JAPONICA)
° 'Mawlet' (JAPONICA)
° 'Minerva' (× CLARKIANA)
° 'Moirheimii' (SPECIOSA)
° 'Moerloesi' (SPECIOSA)
° 'Moerloesii' (SPECIOSA)
° 'Moerloesii' (SPECIOSA)
° 'Moerloesii' (SPECIOSA)
° 'Moerloesi' (SPECIOSA)
° 'Moerloesi' (SPECIOSA)
° 'Moorloesi' (SPECIOSA)
° 'Moorloesi' (SPECIOSA)
° 'Moomijiyama' (prob. × SUPERBA)
† 'Monstroosa' (SPECIOSA)
° 'Moullet' (SPECIOSA)
° 'MOUNT EVEREST' (× VILMORINIANA)
° 'Mount Shasta' (× SUPERBA)
° 'Mt. Everest' (× VILMORINIANA)
° 'Mt. Shasta' (× SUPERBA)
° 'Multiflora' (SPECIOSA)
° 'Nana' (JAPONICA)
† 'Nana' (SPECIOSA)
† 'Nana Compacta' (SPECIOSA)
° 'Naranja' (× SUPERBA)
° 'Nasturtium' (× CALIFORNICA)
° 'NATORP's HYBRID' (?)
° 'Navel' (SPECIOSA)
° 'New Red Sensational' (× SUPERBA)
° 'Nicoline' (× SUPERBA)
° 'Nishikichidon' (× SUPERBA)
° 'Nivalis' (SPECIOSA)
° 'Nivalis Major' (SPECIOSA)
† 'NIVEA' (SPECIOSA)
° 'Nivea Cocinea' (SPECIOSA)
° 'Nivea Extus Cocinea' (SPECIOSA)
° 'Nivea Intus Kermesina' (prob. SPECIOSA)
° 'Orange' (prob. × SUPERBA)
° 'Orange Beauty' (JAPONICA)
° 'Orange Red' (?)
† 'Orange Scarlet' (SPECIOSA)
  'Ormond Crimson' (prob. SPECIOSA)
  'Ormond Scarlet' (prob. SPECIOSA)
° 'Otto Froebel' (× SUPERBA)
° 'Pacific Red' (SPECIOSA)
° 'Papeleui' (SPECIOSA)
† 'Pedunculata' (SPECIOSA)
† 'Pendula' (prob. SPECIOSA)
° 'Perfecta' (× SUPERBA)
° 'Perfecta' (× SUPERBA)
° 'Permesina Semiplena' (SPECIOSA)
° 'Phylis Moore' (SPECIOSA)
° 'Phyllis Moore' (SPECIOSA)
° 'Pigmaea' (JAPONICA)
° 'Pigmaea' (JAPONICA)
° 'Pink' (SPECIOSA)
  'Pink' (?)
° 'Pink Beauty' (× CALIFORNICA)
° 'Pink Lady' (× SUPERBA)
  'Pink Perfection' (?)
° 'Pink Princess' (× SUPERBA)
° 'PINKSTRIPe' (SPECIOSA)
† 'Piriformis' (prob. SPECIOSA)
° 'Plena' (JAPONICA)
° 'Plena' (SPECIOSA)
° 'Porcelain Rose' (× SUPERBA)
° 'Port Eliot' (?)
† 'Princeps' (SPECIOSA)
† 'Princesse Emile Sontza' (SPECIOSA)
† 'Princesse Emilie' (SPECIOSA)
† 'Princesse Emilie Soutzo' (SPECIOSA)
° 'Purity' (?)
° 'Purpurea' (SPECIOSA)
Var. pygmaea (JAPONICA)
° 'Pygmaea' (JAPONICA)
° 'Pygmaea Alba' (JAPONICA)
° 'Pygmy' (JAPONICA)
† 'Pyriformis' (prob. SPECIOSA)
° 'Rakuyo' (prob. × SUPERBA)
° 'Red' (SPECIOSA)
° 'Red Chief' (× SUPERBA)
° 'Red Flowers' (× SUPERBA)
° 'Red Ripples' (SPECIOSA)
° 'Red Ruffles' (SPECIOSA)
° 'Red Sprite' (SPECIOSA)
° 'Red Upright' (SPECIOSA)
° 'Renny Mossel' (× SUPERBA)
° 'Riccartonii' (?)
° 'Rinho' (SPECIOSA)
° 'Rosalba' (SPECIOSA)
† 'Rosea' (SPECIOSA)
° 'Rosea' (× SUPERBA)
° 'Rosea Flora Pleno' (SPECIOSA)
° 'Rosea Flora Plena' (SPECIOSA)
° 'Rosea Grandiflora' (SPECIOSA)
° 'Rosea Grandiflora' (× SUPERBA)
° 'Rosea Grandiflora Semiplena' (SPECIOSA)
° 'Rosea Plena' (SPECIOSA)
° 'Rosea Semiplena' (SPECIOSA)
° 'Rosepink' (SPECIOSA)
° 'Rosepink' (SPECIOSA)
° 'Rosy Morn' (× CALIFORNICA)
° 'Rosy Red' (?)
° 'Rowallana' (× SUPERBA)
° 'Rowallane' (× SUPERBA)
° 'Rowallane Seedling' (× SUPERBA)
° 'Rowallane Variety' (× SUPERBA)
° 'Roxana Foster' (× SUPERBA)
° 'Ruphra' (SPECIOSA)
† 'Rubra' (SPECIOSA)
† 'Rubra-ausruntica' (SPECIOSA)
† 'Rubra Auranticae Duplex Nova' (SPECIOSA)
° 'Rubra Grandiflora' (SPECIOSA)
° 'Rubra Plena' (SPECIOSA)
° 'Rubra Pleno' (SPECIOSA)
† 'Rubra Semiplena' (SPECIOSA)
° 'Rubriflora' (SPECIOSA)
° 'Rubrifolia' (× SUPERBA)
† 'Rubro-aurantiaca' (SPECIOSA)
° 'Rubro Plena' (SPECIOSA)
° 'Rubro-sanguinea Plena' (SPECIOSA)
° 'Ruby Glow' (× SUPERBA)
° 'Russell’s Red' (SPECIOSA)
† 'Salicifolia' (prob. SPECIOSA)
° 'Salmon' (× SUPERBA)
° 'Salmonia' (?)
° 'Salmon Queen' (?)
° 'Sämmlinge von Andenken an Karl Ramcke' (× SUPERBA)
° 'Sanguinea' (× SUPERBA)
° 'Sanguinea Flore Pleno' (SPECIOSA)
° 'Sanguinea Multiflora' (SPECIOSA)
° 'Sanguinea Plena' (SPECIOSA)
† 'Sanguinea Plena Multiflora' (SPECIOSA)
° 'Sanguinea Semiplena' (SPECIOSA)
° 'San Jose' (prob. × CALIFORNICA)
° 'Sargentiana' (JAPONICA)
° 'Sargentiis' (JAPONICA)
† 'Sarmentosa' (prob. SPECIOSA)
° 'Scarlet' (SPECIOSA)
° 'Scarlet' (× SUPERBA)
° 'Scarlet and Gold' (× SUPERBA)
° 'Semi-alba-pleno' (SPECIOSA)
† 'Semi-plena' (SPECIOSA)
† 'Semipleno' (SPECIOSA)
° 'Semperflorae' (× SUPERBA)
° 'Sensational New Red' (× SUPERBA)
° 'Serotina' (SPECIOSA)
° 'Shasta' (?)
° 'Shell Pink' (× SUPERBA)
° 'Shinonome' (× SUPERBA)
° 'Shirabotan' (× SUPERBA)
° 'Shirobotan' (× SUPERBA)
° 'Shirataum' (SPECIOSA)
° 'Shokko' (?)
† 'Simikenriana' (SPECIOSA)
° 'Simon' (SPECIOSA)
° 'Simonii' (SPECIOSA)
° 'Simoni Rubra' (SPECIOSA)
° 'Simonis' (SPECIOSA)
° 'Simonsii' (SPECIOSA)
† 'Simplex Alba' (prob. SPECIOSA)
° 'Single White' (?)
† 'Sinica' (?)
° 'Snow' (SPECIOSA)
- 'Snowbird' (?)
- 'Snow Queen' (SPECIOSA)
- 'Snow White' (SPECIOSA)
- 'Spitfire' (SPECIOSA)
- 'Splendens' (prob. SPECIOSA)
- 'Spring Fashion' (X SUPERBA)
- 'Stanford Red' (X SUPERBA)
- 'Starlight' (SPECIOSA)
- 'Striata' (SPECIOSA)
- 'Sulphurea' (SPECIOSA)
- 'Sulphurea Aurea' (SPECIOSA)
- 'Sulphurea Perfecta' (SPECIOSA)
- 'Sunrise' (X SUPERBA)
- 'Sunset' (X SUPERBA)
- 'Sunset Glory' (X CALIFORNICA)
- 'Sunset Gold' (X CALIFORNICA)
- 'Superba' (X SUPERBA)
- 'Sweet Glow' (X CALIFORNICA)
- 'Taioh-Nishiki' (JAPONICA)
- 'Taojishi' (JAPONICA)
- 'Tall Large Flowering Salmon' (?)
- 'Tani-no-Yuki' (SPECIOSA)
- 'Taroyishi' (SPECIOSA)
- 'Tatsugashira' (prob. SPECIOSA)
- 'Tattagawa' (?)
- 'Teemmei' (?)
- 'Terra Cotta' (?)
- 'Texas Pink' (SPECIOSA)
- 'Texas Scarlet' (X SUPERBA)
- 'Thornless Crimson' (?)
- 'Thornless Pink' (X SUPERBA)
- 'Tiochisi' (prob. JAPONICA)
- 'Tortuosa' (SPECIOSA)
- 'Tortuosa' (X SUPERBA)
- 'Toyo-Nishiki' (SPECIOSA)
- 'Tononishiki' (SPECIOSA)
- 'Trichogyna' (SPECIOSA)
- 'Tricolor' (JAPONICA)
- 'Tsukasa-Butan' (?)
- 'Tsukast' (?)
- 'Var. typica' (JAPONICA)
- 'Ulidia' (X SUPERBA)
- 'Umbellata' (SPECIOSA)
- 'Umbellicata' (SPECIOSA)
- 'Umbellicata Rosea' (SPECIOSA)
- 'Umbicillata' (SPECIOSA)
- 'Umbicillata Rosea' (SPECIOSA)
- 'Umbilicata' (SPECIOSA)
- 'Umbilicata Macrocarpa' (SPECIOSA)
- 'Umbilicata Nana' (SPECIOSA)
- 'Umbilicata Plena' (prob. SPECIOSA)
- 'Van Aerschotii' (prob. SPECIOSA)
- 'Variabilis Tricolor' (SPECIOSA)
- 'Variegata' (SPECIOSA)
- 'Variegatis' (SPECIOSA)
- 'Vedtariensis' (X VILMORINIANA)
- 'Verboom's Vermilion' (X SUPERBA)
- 'Vermilion' (X SUPERBA)
- 'Vermilion Double' (X SUPERBA)
- 'Versicolor' (SPECIOSA)
- 'Versicolor Lutea' (SPECIOSA)
- 'Versicolor Lutescens' (SPECIOSA)
- 'Versicolor Plena' (prob. SPECIOSA)
- 'Versicolor Semiplena' (prob. SPECIOSA)
- 'Vesuvius' (X SUPERBA)
- 'Wakaba' (X SUPERBA)
- 'White' (SPECIOSA)
- 'White' (SPECIOSA)
- 'White Upright' (prob. SPECIOSA)
- 'White Fruit' (X SUPERBA)
- 'Willis Strain' (X SUPERBA)
- 'Var. wilsonii' (CATHAYENSIOS)
- 'Winter Cheer' (prob. X SUPERBA)
- 'Winter Flowering' (?)
- 'Woking Star' (?)
- 'Yaegaki' (X SUPERBA)
- 'Yellow' (SPECIOSA)
- 'Yokuku' (?)
- 'Yuga' (prob. SPECIOSA)
- 'Yuyo' (prob. SPECIOSA)
- 'Zabelii' (?)
- 'Zansetsu' (?)
- 'Zöge' (JAPONICA)
II. LIST OF SPECIES AND HYBRID GROUPS
WITH THEIR INCLUDED CULTIVARS

This second list is comprised of the names of species, varieties and hybrid groups (which, when appearing for the first time are indicated by boldface type; however, the hybrid groups, when cited in the discussion, are indicated by LARGE and SMALL capitals) together with the cultivars included under each, in alphabetical order; the cultivar names which are maintained are indicated by LARGE and SMALL capitals. Botanical synonyms and polynomials, which were latinized cultivar names, are indicated by italics. The earliest bibliographic reference is given for each cultivar; if two references are cited the first refers to the earliest mention of the name, the second to the place of publication of the description. In order to keep this list within reasonable limits, the transfer of cultivars or varieties from one species to another is not included. Synonymy is given when necessary to prevent further confusion. A short description of each cultivar is also provided, based on living plants whenever possible or compiled from descriptions published previously. It was also found necessary to supplement the references to each species or hybrid group with a short “horticultural” description, since the intrinsic value of the cultivars and their uses in horticulture pertain to both the general aspect of the shrub and the color of the flowers.

Many difficulties were encountered during this study. Some, especially those due to the instability of the nomenclature in Japanese Quinces, were time consuming. Each name had to be sought in books and nursery catalogues under at least two genera, Cydonia and Chaenomeles. The controversy over the application of the specific epithet “japonica” induced me to consider any cultivar or varietal name in Chaenomeles as a member of an undetermined species or hybrid group. Consequently, each cultivar had to be examined in order to prepare List II. The information obtained was organized under the following categories, given here in order of decreasing importance: 1, observations on living plants; 2, studies of herbarium specimens; 3, compilation of nomenclatural synonyms; 4, descriptions of cultivars; 5, records of parentage; 6, dates of origin. All the evidence was evaluated according to the following characters present in the three types, “cathayensis,” “japonica,” and “speciosa”: appearance of the shrub; pubescence or warping of the twigs; serration, size, and shape of the leaves; color, size, and shape of the flowers; appearance, size, and shape of the fruits. The results determined whether or not a given cultivar was of hybrid origin. Some of the conclusions were contrary to the general opinions often accepted by horticulturists and given in nursery catalogues.

Another difficulty arose in deciding whether or not a given name represents a definite and stable clone reproduced vegetatively, or only a variable unstable population such as a color selection in a batch of seedlings. Since there was no way of determining to which category some of the names belong, the situation is stated for each case according to the evidence. The botanical varieties are

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also included since most of them were described from gardens and are, in fact, cultivars, or were introduced to cultivation after being described from the “wild.”

An additional problem encountered was the variation in spelling. For instance Chaenomeles ‘Moerloosei’, named for the Belgian horticulturist Moerloose, is found in nursery catalogues under ‘Maerloosii’, ‘Moerheimii’, ‘Moerlozi’, etc. It is hoped that the list of orthographic variations will help nurserymen to correct and coordinate their files and rectify the impression that they have a score of different entities. By careful study it has been possible to verify the fact that such cultivars as ‘Cardinal’ and ‘Cardinalis’, ‘Choshan’ and ‘Choshun’, ‘Shasta’ and ‘Mount Shasta’, ‘Variegata’ and ‘Variegatis’, etc., are not variations in spelling within one species, but apply to entirely different plants.


Shrubs reaching 10 feet or more, easily trained to form a small tree. Branches few, straight, erect, stiff, strongly armed with numerous spurs. Young shoots pubescent or glabrescent, those of the second year completely glabrous. Leaves elliptic to lanceolate, when young commonly covered by a thick fulvous tomentum on the under surface, sharply serrate with the serration terminating in an awn-like tip. Flowers white to pink. Mostly cultivated for the abundant ovoid fruits up to 15 or even 20 cm. long, which ripen late.

The fruits are used in China for medicinal purposes, and local varieties are assumed to exist there in cultivation. Although C. cathayensis has been found in the wild in China, and in southern Tibet up to an altitude of 9500 feet, it is not hardy north of Zone VI.


Var. wilsonii (Chaenomeles lagenaria var. wilsonii Rehder in Sargent, Pl. Wilson. 2: 298. 1915) = C. cathayensis. This variety was distinguished by Rehder from C. lagenaria var. cathayensis by “the dense fulvous tomentum of the under side of its leaves.” This character, however, does not appear in plants reproduced by seeds, and is neither correlated with any geographical or ecological distribution, nor with other morphological characters of wild plants. Glabrous or pubescent leaves seem to appear at random in young plants, therefore a varietal rank is not justified.

Var. japonica.


Dwarf shrub about 3–4 feet high. Branches widely spreading with short, slender spines. Young shoots covered with a short, scabrous tomentum; those of the second year verruculose. Leaves obovate to spatulate, glabrous even when young, coarsely crenate. Flowers small, usually salmon to orange. Fruits similar in shape to gnarled apples, small, to 4 cm. ripening early.

The extremely fragrant fruits are used for making jelly. This species is wild in Japan, usually growing at low altitudes. It is the hardiest species in the genus.


Since the name ‘Alba’ is preoccupied by a member of the Superba group, we propose to call this cultivar ‘Zōge’ which means ivory in Japanese.

Var. alpina (C. japonica var. alpina Maxim., Bull. Acad. Sci. St. Petersb. 19: 168. 1873). Smaller than C. japonica var. japonica in all its parts. The type specimen of this variety was collected on the mountains of the Island of Kyushu, Japan. This name should not be applied to a cultivar.

'Alpina' (Cydonia maulei var. alpina Rehder in Bailey, Cycl. Am. Hort. 1: 427. 1900) = ‘SARGENTII’. The material in cultivation under this name was grown originally from seeds brought by Sargent from one of the Japanese islands other than Kyushu.

'Alpina' (Chaenomeles alpina Koehne, Gatt. Pomac. 28. pl. 2, f. 23 a–c. 1890) = C. japonica var. japonica.


'AUREA' (Wayside Gard., Mentor, Ohio, Cat. 1942). Flowers orange, suffused with rosy red, single. Selection of Wayside Gardens, before 1942.

'DOROTHY ROWE’ (formerly ‘Pygmaea alba’ a name not acceptable according to the International Code of Nomenclature for Cultivated Plants). Flowers small, white tinted with pink and lemon, single. Selection of Dubois Nursery, Cincinnati, Ohio, before 1960. Named for Mrs. Dorothy S. Rowe who founded the Stanley M. Rowe Arboretum where this cultivar is growing. This is a new cultivar previously undescribed.


Selection of W. B. Clarke, San Jose, California, probably no. 330, sent to Kluis Nursery, Boskoop, Netherlands, around 1946.


‘Maulei Seedlings’ (Slocok Nurs., Woking, Engl., Cat. 1958–59). Flowers orange-flame. Probably not a clone, but only selected seedlings of *C. japonica* ‘Maulei’.


‘Moulei’ (Van Geert Nurs., Anvers, Belg., Cat. 1896, without description) = ‘Maulei’.

‘Nana’ (cult. at the Univ. of Connecticut, Storrs, Conn.) = ‘Pigmanii’.


Var. *pygmaea* (*C. japonica* var. *pygmaea* Maxim. *Bull. Acad. Sci. Petersb.* 19: 165. 1873). Branches often subterranean. The type specimen of this variety was collected around Yokohama, Japan. The name should not be applied to a cultivar. It is not a synonym of *C. japonica* var. *alpina* Maxim.


‘Pygmaea alba’ (cult. at the Stanley M. Rowe Arb., Cincinnati, Ohio). This name is not acceptable according to the International Code of Nomenclature for Cultivated Plants which prohibits new names of cultivars in a Latin form. We propose to name it ‘Dorothy Rowe’.

‘Pygmy’ (Linn County Nurs., Center Point, Iowa, Cat. 1960) = ‘Sargentii’.

‘Sargentiana’ (cult. at the Wageningen Arb., Wageningen, Neth.) = ‘Sargentii’.

‘Sargentii’ (*Cydonia sargentii* Lemoine Nurs., Nancy, Fr., Cat. no. 143: ix. 1899). Shrub more dwarf than the typical form of the species; flowers
salmon-pink to orange, single. Named for C. S. Sargent, first director of the Arnold Arboretum; introduced by him from Japan in 1892.


'Tiochisi' (cult. at the Univ. of Minn., St. Paul, Minn.) = 'Taiojishi'.

'Tricolor' (C. japonica tricolor Parsons Nurs., Flushing, N. Y., Cat. 1887, without description, ibid., Descr. Cat. no. 39 [prob. 1889], with description). Leaves pink and white variegated; flowers salmon-pink. Origin unknown, before 1887.

Var. typica (Cydonia japonica var. typica Makino, Bot. Mag. Tokyo 22: 63. 1908) = C. japonica var. japonica.

'Zōge' (formerly 'Alba', a name retained for another cultivar). Flowers creamy-white, single. In Japanese gardens. This cultivar was illustrated in Iwasaki, Honzo Dzufu 60, fol. 10 recto. 1919 (as C. japonica f.). Zōge, meaning ivory, is an allusion to the color of the flowers.


This species is typified by plate no. 692 (not 629) of the Bot. Mag. 18 (1803). The plate represents a flowered branch surmounted by a young shoot. The flowers are borne on long peduncles, a normal development in warm weather. The illustration was drawn in August as indicated in the text. The specimen represented has abnormal, semidouble, and male flowers only.

Shrubs usually 6 feet, occasionally up to 10 feet high. Branches numerous, erect to spreading, spiny. Young shoots glabrous or slightly pubescent; those of the second year glabrous. Leaves ovate to oblong, glabrous, or when young slightly pubescent on the veins of the under surface, sharply serrate. Flowers normally red, but also white or pink; similar variation among wild specimens. Fruits very variable in shape, size, and time of ripening.

The fruits ripen well indoors and can be used for making jelly. This species is found wild in China at various altitudes. The shrub is hardy, but north of Zone V the flower buds have a tendency to freeze above snow line.


'Alba' (Pyrus japonica alba Lodd. Bot. Cab. 6: 541, pl. 1821) = 'CANDIDISSIMA'.

'Alba' (Cydonia japonica alba Späth, Späth-Buch, 220. 1930) = 'NIVALIS'.

'Alba candida' (Dickinson Nurs., Chatenay, Fr., Cat. 1889–90, without description) = 'CANDIDA'.

'Alba Cincta' (C. japonica alba cincta Beissner et al., Handb. Laubh.-Ben., 181. 1903, without description). Flowers white with a pink margin, single;
fruits ovoid, calyx accrescent. Probably selection of Louis van Houtte, Ghent, Belgium, before 1861.

'ALBA CINCTA PLENA' (Barbier Nurs., Orléans, Fr., Cat. 1896, without description). Flower color and origin unknown, before 1896.

'Alba cintra' (Wister, Swarthmore Pl. Notes 1955: 212. 1955) = 'ALBA CINCTA'.

'Alba cintra plena' (Wister, Swarthmore Pl. Notes 1942: 128. 1942, without description) = 'ALBA CINCTA PLENA'.

'ALBA FLORIBUNDA' (C. japonica alba floribunda Carrière, Rev. Hort. 1889: 496. 1889). Flowers white tinted with pink, single, very numerous. English cultivar, introduced before 1889.


'Alba grandiflora Carrierei' (C. japonica alba grandiflora Carrierei Morel, Rev. Hort. 1909: 277. 1909) = 'ALBA GRANDIFLORA'.

'ALBA GRANDIFLORA PLENA' (Cydonia japonica alba grandiflora plena Froebel Nurs., Zurich, Switz., Cat. no. 90. 1880, without description; Carrière, Rev. Hort. 1886: 182. 1886, with description). Flowers large, white tinted with pink, semidouble. Selection of Otto Froebel, before 1872.


'ALBA PICTA' (C. japonica alba picta Späth Nurs., Berlin, Germ., Cat. 1887). Flowers white tinted with rose-pink, single. Selection of Ludwig Späth, before 1887.

'Alba plena' (Carrière, Rev. Hort. 1886: 182. 1886) = 'ALBA GRANDIFLORA PLENA'.

'Alba punctata rosea' (C. japonica alba punctata rosea Letellier Nurs., Caen, Fr., Cat. 1897) = 'ALBA ROSEA'.

'ALBA ROSEA' (Wister, Swarthmore Pl. Notes 1942: 126. 1942, without description). Flowers white, outer side rose-pink, single; fruits ovoid, calyx accrescent. Selection of Ludwig Späth, Berlin, Germany, before 1897, under the name 'Albo-rosea'.

'ALBA SEMIPLENA' (Cydonia japonica alba semiplena Froebel Nurs., Zurich, Switz., Cat. no. 90. 1880, without description; Carrière, Rev. Hort. 1886: 182. 1886, with description). Flowers white tinted with pink, semidouble; fruits apple shaped, umbilicate. Selection of Otto Froebel, before 1873.

'ALBA SIMPLEX' (C. japonica alba simplex Parsons Nurs., Flushing, N. Y., Cat. 1873). Flowers white, single. Probably selection of Parsons Nurseries, before 1873.

'Alba variegata' (C. japonica alba variegata Simon-Louis Nurs., Metz, Fr., Cat. 1886-87, without description; ibid., Cat. 1900-01, with description) = 'VARIEGATA'.

'Albicans' (Vollert Nurs., Lübeck, Germ., Cat. 1899-1900) = 'CANDIDISSIMA'.

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'Albiflora' (Cydonia speciosa var. albiflora Guimpel et. al., Abbild. Fremd. Holzg. 1: 88. 1825) = 'CANDIDISSIMA'.

'Albipicta' (C. japonica albipicta Späth Nurs., Berlin, Germ., Cat. 1930) = 'ALBA PICTA'.

'Albo-cincta' (Cydonia japonica albo-cincta Van Houtte, Flore des Serres 14: 23. pl. 1403. 1861) = 'ALBA CINCTA'. The name used in the title is 'Albo-cincta', while the name under the plate is 'Rosalba'.

'Albo-picta' (C. japonica albo-picta Späth Nurs., Berlin, Germ., Cat. 1915–16) = 'ALBA PICTA'.

'Albo-rosea' (Cydonia japonica albo-rosea Muth, Gartenw. 7: 113. 1902) = 'ALBA ROSEA'.

'Angustifolia' (Chaenomeles angustifolia Koidzumi, Jour. Coll. Sci. Tokyo 34(2): 97. 1913). Leaves very narrow, up to 7 cm. long, 15 mm. broad; flowers white, single; fruits ovoid. Described as a "species" by Koidzumi, it proves from the study of herbarium specimens to be only a cultivar of C. speciosa. In Japanese gardens.

'Apple Blossom' (Clarke Nurs., San Jose, Calif., Gard. Aristocrats 1937: 11. 1937). Flowers white, tinted with pink and lemon, single or often semidouble; fruits ovoid or apple shaped, calyx accrescent. Selection of the Leonard Nursery, Piqua, Ohio, before 1932. It is not a synonym of 'MOERLOOSEI'.

'Apple Blossom Pink' (Leonard Nurs., Piqua, Ohio, Cat. 1932) = 'APPLE BLOSSOM'.


'Atrococcinea flore pleno' (Van Geert Nurs., Anvers, Belg., Cat. 1893) = 'ATROCOCCINEA PLENA'.

'Atrococcinea Plena' (Cydonia japonica atrococcinea plena Van Houtte Nurs., Ghent, Belg., Cat. 1869, without description; Späth Nurs., Berlin, Germ., Cat. 1890, with description). Flowers red, semidouble; fruits small, apple shaped, ribbed, umbilicate. Probably selection of Louis van Houtte, before 1869.


'Atropurpurea' (Goldring, Garden 40: 127. 1891) = 'ATROSANGUINEA'.

'Atrosanguinea' (Cydonia japonica var. atrosanguinea Lemaire, Ill. Hort. 3: 107. 1856). Flowers "blood-red," single. Selection of Moerloose, Ledeberg, Belgium, before 1856. It is not a synonym of 'SIMONII'.

'Atrosanguinea flore plena' (Bay State Nurs., N. Abington, Mass., Cat. 1899) = 'ATROSANGUINEA PLENA'.

'ATROSANGUINEA PLENA' (Cydonia japonica atrosanguinea plena Froebel Nurs., Zurich, Switz., Cat. no. 90. 1880, without description; Carrière, Rev. Hort. 1886: 182. 1886, with description). Flowers bright red, semidouble. Selection of Otto Froebel, before 1880. Similar to 'SIMONII'.

'Aurantiaca' (C. japonica aurantiaca Prince Nurs., Flushing, N. Y., Cat. 1856) = 'FLORE RUBRO AURIANTIACA'.


'Aurea' (C. japonica aurea Parsons, Flushing, N. Y., Cat. 1873, without description) = 'SULPHUREA PERFECTA'.


'BALTZII' (Späth Nurs., Berlin, Germ., Cat. 1887). Flowers rosy red, single; fruits apple shaped, umbilicate. Selection of Ludwig Späth, introduced 1885. Named for Mr. Baltz, former head gardener of Späth Nurseries.

'BLOOD RED' (Leonard Nurs., Piqua, Ohio, Cat. 1933). Flowers deep "blood-red," single; fruits large, apple to orange shaped, umbilicate. Origin unknown, before 1933. It is not a synonym of 'RUBRA GRANDIFLORA' from which it differs by the consistently broader leaves.

'Blush' (Ellwanger & Barry Nurs., Rochester, N. Y., Cat. 1870) = 'CANDIDISSIMA'.

'Blush Japan' (Ellwanger & Barry Nurs., Rochester, N. Y., Cat. 1867) = 'CANDIDISSIMA'.


'Boule de Feu' (Princeton Nurs., Princeton, N. J., Retail Price List 1941, without description; ibid., Wholesale Price List 1946, with description) = 'FIREBALL'.

'Brillant' (Hemeray Aubert Nurs., Orléans, Fr., Cat. 1956) = 'BRILLIANT'.

'BRILLIANT' (Leonard Nurs., Piqua, Ohio, Cat. 1939). Flowers varying from rose-pink to rosy red, single; fruits apple shaped, umbilicus pointed. Origin unknown, before 1939.

'Bugeauti' (C. japonica Bugeauti Anonymous, hand-written cat. of Arboretum Segrezianum, Segrez, Fr., 1877, without description). Flower color and origin unknown, probably a French cultivar, before 1877.

'Camellia-Bloemige' (cult. at the Villa Taranto Gard., Pallanza, It.) = 'CAMELLIAFLORA'.

'Camelliaeefolia' (Nicholson, Kew Hand List, ed. 2. 323. 1902, without description)
scription). This list gives as a synonym Pyrus japonica of plate 692 in the Botanical Magazine. Since this plate typifies Chaenomeles speciosa, the cultivar ‘Camelliaefolia’ = C. speciosa var. speciosa.


‘Candidissima’ (Defossé-Thuillier Nurs., Orléans, Fr., Cat. 1874, without description; Andorra Nurs., Philadelphia, Pa., Cat. 1906, with description). Flowers white tinted with pink, single. The name ‘Candidissima’ has replaced older names applied to the same cultivar. Already known in Europe in 1813. Probably introduced from Japanese gardens.


‘Cardinalis’ (C. japonica var. cardinalis Lemaire, Ill. Hort. 3: sub pl. 107. 1856). Flowers bright red, single or semidouble; fruits apple shaped, umbilicus pointed. Selection of Moerloose, Ledeberg, Belgium, around 1855. ‘Cardinalis’ which originated as a chance seedling in Europe, has been elevated to the rank of species by Nakai, Bot. Mag. Tokyo 32: (145). 1918. This “species” was based on the figure published by Carrière, Rev. Hort. 1872: 331, f. 1. 1872, and maintained because the plant was thought to grow wild in China and on one of the Japanese islands. This latter information from a native collector proved to be erroneous, and, although Japanese authors continue to treat it as a species, it is, in fact, a cultivar of garden origin.


‘Coccinea plena’ (C. japonica coccinea plena Minier Nurs., Angers, Fr., Cat. 1960) = ‘Atrococcinea Plena’.
'CONTORTA' (C. superba contorta Clarke Nurs., San Jose, Calif., Gard. Aristocrats 9: 18. 1942). Branches and spines tortuous; flowers white tinted with pink; fruits apple shaped or slightly ovoid, calyx accrescent. This cultivar was imported from Japan by Toichi Domoto Nursery, Haywood, California, about 1929. At the International Flower Show in New York in March, 1936, it was awarded a Silver Medal. 'CONTORTA', in Japan, is called 'RINHO' which is a sport of 'TATSUGASHIRA'.

'Dark Crimson' (C. japonica Dark Crimson, Ellwanger & Barry Nurs., Rochester, N. Y., Cat. 1867) = "ATROSANGUINEA".


'DOCTOR BANG'S PINK' (cult. at the Mich. State Univ., East Lansing, Mich., and at the Univ. of Minn., St. Paul, Minn.). Flowers salmon-pink, single; fruits small, orbicular, umbilicus wide and protuberant. Selection of Interstate Nurseries, Hamburg, Iowa. Named for Dr. Bang of Hamburg, Iowa, in whose garden it was found, before 1955.

'DOLICHOCARPA' (C. japonica dolichocarpa Depken, Mitt. Deutsch. Dendr. Ges. 22: 321, f. 1913). No flower color indicated; fruits pear shaped. The original shrub was raised from seed in Oberneuland, Germany, before 1913.

'DOUBLE FLOWERING' (Ellwanger & Barry Nurs., Rochester, N. Y., Cat. 1867) = 'RUBRA SEMPLENA'.

'Double Scarlet' (Strong Nurs., Brighton, Mass., Cat. 1872) = 'RUBRA PLENA'.

'DR. BANG'S PINK' (cult. at the Mich. State Univ., East Lansing, Mich., and at the Univ. of Minn., St. Paul, Minn.) = 'DOCTOR BANG'S PINK'. According to a recommendation of the International Code of Nomenclature for Cultivated Plants, names beginning with abbreviations should be avoided.


'EBURNEA' (Carrière, Rev. Hort. 1872: 331. f. 4. 1872). Flowers small, pure white, single. Carrière wrote "Japanese species (?) introduced by the late Siebold." On this information, Nakai, Bot. Mag. Tokyo 32: 146. 1918, based Chaenomeles eburnea (Carr.) Nakai. Since the species does not occur wild in Japan, he gave as its origin China, with a question mark. This plant does not occur in China either, and is only a garden form differing from the typical form of the species in its white flowers, glabrous styles, and narrower leaves. It should be considered a cultivar.


'Emilie Soutzo' (Parsons Nurs., Flushing, N. Y., Cat. 1895) = 'PRINCESSE EMILIE SOUTZO'.

as a synonym of the cultivar 'Alba rosea'. Iwata, Jour. Agr. Sci. [Setagaya] 5(4): 58. 1960, cites it in the synonymy of C. cardinalis Carrière, which has red, often semidouble flowers, very different from 'Eugenioïdes' with white, pink-tinted, single flowers. It is probably better treated as a cultivar = 'ALBA ROSEA'.

'Euphrosyne' (Cheal Nurs., Crawley, Eng., Cat. 1931–32). Flowers pure white, single. Selection of the Cheal Nursery, before 1931.


'Eximia' (Cydonia japonica eximia Froebel Nurs., Zurich, Switz., Cat. no. 90. 1880, without description; Späth Nurs., Berlin, Germ., Cat. 1890, with description). Flowers pink to rosy red; fruits orange shaped, umbilicate. Selection of Otto Froebel, before 1880. Similar to 'UMBILICATA'.

'Extus' (Duncan & Davies Nurs., New Plymouth, N. Z., Cat. 1926) = 'NIVEA EXTUS COCCINEA'.

'Extus coccinea' (C. japonica var. extus coccinea Carrière, Rev. Hort. 1872: 331, f. 3. 1872). This Belgian variety selected before 1867 under the name of 'NIVEA EXTUS COCCINEA' was redescribed and illustrated by Carrière who named it 'Extus coccinea'. From Carrière's description, Nakai, Jap. Jour. Bot. 4: 330. 1929, elevated it to the rank of species where it has been maintained by Japanese authors until now, chiefly on the basis of the character of the woolly styles. 'Extus coccinea' is a cultivar which appeared in Belgium in a batch of seedlings, and should correctly be called 'NIVEA EXTUS COCCINEA'.

'Falconnet' (Falconnet Nurs., Thoissey, Fr., Cat. 1960) = 'FALCONNET CHARLET'.


'FALCONNET CHARLET' (Barbier Nurs., Orléans, Fr., Cat. 1915, without description; Duncan & Daires, New Plymouth, N. Z., Cat. 1926, with description). Flowers pink tinted with rose-pink, semidouble; fruits large, apple shaped, umbilicate. Selection of Falconnet Nursery, Thoissey, France, before 1900. This is not a synonym of 'CAMEO', or of 'ROSEA PLENA'.

'Falconnet Charlet' (Kohankie Nurs., Painesville, Ohio, Cat. 1938) = 'NIVALIS'.

'Falconnet Charlot' (Jackman Nurs., Woking, Engl., Cat. 1936–37) = 'FALCONNET CHARLET'.

'Falconnet Charlot' (Kohankie Nurs., Painesville, Ohio, Cat. 1945–46) = 'NIVALIS'.

'Falconnet Scarlet' (Delaunay Nurs., Angers, Fr., Cat. 1959–60) = 'FALCONNET CHARLET'.

'Fastigiata' (C. japonica fastigiata A. Leroy Nurs., Angers, Fr., Cat. 1873). Branches fastigate. Color of the flowers and origin unknown, before 1873.

'Fireball' (formerly 'Boule de Feu', a name retained for another cultivar, Cult. at the Planting Fields Arb., Oyster Bay, L.I., N. Y., from Princeton
Flowers flame-red, semidouble; fruits large, apple shaped, upper depression very broad, terminating in a narrow tip. This cultivar was confused with 'Boule de Feu' which belongs to the Superba group and possesses single flowers. We propose to translate this French name to 'Fireball', its English equivalent. May have originated in England, before 1940.

'Flora carnea' (Simon-Louis Nurs., Metz, Fr., Cat. 1911-12) = 'Carnea'.

'Flore albo' (Cydonia japonica flore albo Loudon, Arb. & Frut. Brit., 932. 1838) = 'Candidissima'.

'Flore Albo Fructu Odorata' (Cydonia japonica flore albo fructu odorata Papeleu Nurs., Ledeberg, Belg., Cat. 1852-53). Flowers white tinted with pink, single; fruits very fragrant. Selection of Moerloose, Ledeberg, Belgium, before 1852.

'Flore Albo Inermis' (Cydonia japonica flore albo inermis Papeleu Nurs., Ledeberg, Belg., Cat. 1852-53). Shrubs spineless; flowers white tinted with pink, single. Selection of Moerloose, Ledeberg, Belgium, before 1852.

'Flore albo pleno' (Cydonia japonica flore albo pleno L. Leroy Nurs., Angers, Fr., Cat. 1872) = 'Alba Grandiflora Plena'.

'Flore albo semipleno' (C. japonica flore albo semipleno A. Leroy Nurs., Angers, Fr., Cat. 1873) = 'Alba Semiplena'.

'Flore atrosanguinea' (Cydonia japonica flore atrosanguinea Papeleu Nurs., Ledeberg, Belg., Cat. 1852-53) = 'Atrosanguinea'.

'Flore aurantiaca' (Cydonia japonica flore aurantiaca Papeleu Nurs., Ledeberg, Belg., Cat. 1856-57) = 'Flore Rubro Aurantiaca'.

Flore carneo' (Cydonia japonica flore carneo Papeleu Nurs., Ledeberg, Belg., Cat. 1852-53) = 'Carnea'.

'Flore coccineo' (Cydonia japonica flore coccineo Papeleu Nurs., Ledeberg, Belg., Cat. 1852-53) = 'Coccinea'.

'Flore kermesino' (Cydonia japonica flore kermesino Späth Nurs., Berlin, Germ., Cat. 1887) = 'Kermesina Semiplena'.

'Flore plena' (C. japonica flore plena Waterer's Nurs., Twyford, Eng., Cat. 1938-39) = 'Rosea Plena'.

'Flore plena rosea' (C. japonica flore plena rosea Hillier Nurs., Winchester, Eng., Cat. 1942) = 'Rosea Plena'.

'Flore pleno' (Cydonia japonica flore pleno Waterer's Nurs., Woking, Eng., Cat. 1851, without description) = 'Rubra Plena'.

'Flore pleno' (Cydonia japonica flore pleno Hillier Nurs., Winchester, Eng., Cat. 1930) = 'Rosea Plena'.

'Flore purpurea' (C. japonica flore purpurea Weisse Nurs., Kamenz, Germ., Cat. 1895) = 'Atrosanguinea'.

'Flore rosea plena' (C. lagenaria flore rosea plena Sheridan Nurs., Clarkson, Can., Cat. 1961) = 'Rosea Plena'.


'Flore rubro pleno' ('Cydonia japonica flore rubro pleno Papeleu Nurs., Ledeberg, Belg., Cat. 1852–53) = 'Rubra Plena'.


'Floribunda' ('Cydonia japonica floribunda Bean, Kew Hand List, ed. 3. 139. 1925) = 'Alba Floribunda'.


'Foliis Variegatis' ('C. japonica foliis variegatis A. Leroy Nurs., Angers, Fr., Cat. 1873), leaves “variegated.” Flower color and origin unknown, before 1873.

'Fructa odoratissima' (Wister, Swarthmore Pl. Notes 1942: 128. 1942) = 'Flore Albo Fructu Odorata'.

'Fructico odoratissima' (Wister, Swarthmore Pl. Notes 1955: 212. 1955) = 'Flore Albo Fructu Odorata'.

'Fructu odoratissimo' ('Cydonia japonica fructu odoratissimo Lemaire, Ill. Hort. 3: 107. 1856) = 'Flore Albo Fructu Odorata'.

'Gandavensis' ('C. japonica gandavensis Anonymous [list of C. Baltet], Garden 13: 44. 1878, without description). Flower color and origin unknown, probably a Belgian cultivar, before 1878. Named for the city of Ghent in Belgium.


'Grandiflora' ('Cydonia japonica grandiflora Van Houtte Nurs., Ghent, Belg., Cat. 1869, without description; Parsons Nurs., Flushing, N. Y., Cat. 1879, with description). Flowers large, white tinted with pink and lemon, single
or slightly semidouble; fruits large, ovoid, calyx accrescent. Origin unknown, before 1869.


‘Grandiflora rosea’ (Cydonia japonica grandiflora rosea L. Leroy Nurs., Angers, Fr., Cat. 1913, without description) = ‘Rosea Grandiflora’.


‘Histrix’ (C. japonica histrix Simon-Louis Nurs., Metz, Fr., Cat. 1886-87, without description; ibid., Cat. 1900-01, with description). Flowers soft pink, single. Origin unknown, before 1886.


‘Ignis’ (C. japonica ignis Letellier Nurs., Caen, Fr., Cat. 1897) = ‘Ignnea’.


‘Japan Blush’ (Parsons Nurs., Flushing, N. Y., Cat. 1840) = ‘Candidissima’.


‘Japan Scarlet’ (Cydonia japonica Japan Scarlet, Parsons Nurs., Flushing, N. Y., Cat. 1840) = ‘Rubra’.

‘Japan White’ (California Nurs., Niles, Calif., Cat. 1888, without description; ibid., Cat. 1897, with description) = ‘Candidissima’.


1941). Winter bloomer; flowers white, white-and-pink, pink or red, on the same branch, single. Selection of K. Wada, Hakoneya Nurseries, before 1941. Kan-Toyo-Nishiki means mid-winter Toyo-Nishiki, this cultivar being a winter-flowering form of 'TOYO-NISHIKI'.

'Kermesiana semi-plena' (Kingsville Nurs., Kingsville, Md., Cat. 1947) = 'KERMESINA SEMIPLENATA'.


'Kermesina Semiplena' (Späth Nurs., Berlin, Germ., Cat. 1890). Flowers salmon to rose-pink, semidouble; fruits small, ovoid, slightly ribbed, umbilicate. Selection of Ludwig Späth, before 1887.


'Kokuko' (Cydonia japonica Kokuko, Hakoneya Nurs., Numazu-shi, Jap., "Jap. Gard. Treasures" 1936). This name was corrected by the Hakoneya Nurseries to 'Kokko'.

'Lady Emily Swartz' (cult. at the Arnold Arb., Jamaica Plain, Mass., from Parsons Nurs., Flushing, N. Y., in 1884, now dead). Flower color and origin unknown, before 1884.


'Limoni' (cult. at the Nat. Arb., Washington, D. C.). Flower color and origin unknown, before 1960. From examination of sterile material, it does not seem to be a synonym of 'Simoni'.


'Lutea Macrantha' (C. japonica lutea macrantha Van Houtte Nurs., Ghent, Belg., Cat. 1869, without description; Späth Nurs., Berlin, Germ., Cat. 1890, with description). Flowers large, creamy yellow, single. Origin unknown, before 1869.

'Lutea Viridis' (C. japonica lutea viridis Van Houtte Nurs., Ghent, Belg., Cat. 1869, without description; A. Leroy Nurs., Angers, Fr., Cat. 1873, with description). Flowers greenish white turning pink, single. Origin unknown, before 1869.

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‘Macrantha’ (*C. japonica macrantha* Simon-Louis Nurs., Metz, Fr., Cat. 1886–87, without description; *ibid.*, Cat. 1900–01, with description). Flowers large, red, single. Origin unknown, before 1886.


‘Maerloosii’ (*C. japonica Maerloosii* Parsons, Flushing, N. Y., Cat. 1873) = ‘Moerloosei’.


‘Mallardii’ (Beckett, Garden 71: 262. 1907). Flowers creamy white, single. This is the ‘Mallardii’ offered by European nurserymen now, and grown in arboreta in the United States. The first ‘Mallardii’ still being in cultivation, a second should not be grown under the same name. We propose to call it ‘Mallarot’, a name used by Delaunay Nurseries for the same cultivar.


‘Mallordii’ (Hesse Nurs., Weener-Ems, Germ., Cat. 1903–04) = ‘Mallardii’.

‘Mallordu’ (name in an unpublished list of Dr. H. R. Kemmerer, Univ. of Ill.) = ‘Mallardii’.


‘Moerloosei’ (*Cydonia japonica Moerloosei* Grignan, Rev. Hort. 1903: 20. 1903). Flowers white striped rose-pink, single; fruits more or less ovoid. Selection of Moerloose, Ledeberg, Belgium, before 1856. Named by A. Papeleu ‘Moerloosii’ for Moerloose, horticulturist who originated many cultivars in Chaenomeles. The name ‘Moerloosii’ was later corrected to ‘Moerloosei’. Award of Merit of the Royal Horticultural Society in 1957.


'Moerlozi' (C. japonica Moerlozi California Nurs., Niles, Calif., Cat. 1908–09) = 'Moerloosei'.

'Moorlosii' (Mouillefert, Traité Arb. & Arbriss. 1: 540. 1892) = 'Moerloosei'.

'Monstruosa' (C. japonica monstruosa A. Leroy Nurs., Angers, Fr., Cat. 1873, without description). Flower color and origin unknown, before 1873.

'Multiflora' (Barbier Nurs., Orléans, Fr., Cat. 1896, without description) = 'Atroccocinea'.

'Nana' (Cydonia japonica nana Lemaire, Ill. Hort. 3: 107. 1856) = 'Umbilicata Nana'.

'Nana compacta' (C. japonica nana compacta Van Houtte Nurs., Ghent, Belg., Cat. 1867, without description) = 'Umbilicata Nana'.

'Navel' (Manning, Pl. Buyer's Index 1926, without description) = 'Umbilicata'.

'Nivalis' (C. japonica nivalis Lemoine Nurs., Nancy, Fr., Cat. 1881, without description; Carrière, Rev. Hort. 1886: 182. 1886, with description). Flowers pure white, single; fruits apple shaped, umbilicate. Origin unknown, before 1881.

'Nivalis major' (Bunyard, Planters' Handbook 86. 1908) = 'Nivalis'.

'Nivea' (A. Leroy Nurs., Angers, Fr., Cat. 1873). Flowers pure white, single. Origin unknown, before 1873.

'Nivea coccinea' (C. japonica nivea coccinea L. Leroy Nurs., Angers, Fr., Cat. 1876, without description; Späth Nurs., Berlin, Germ., Cat. 1931–32, with description) = 'Nivea Extus Coccinea'.

'Nivea Extus Coccinea' (Van Houtte Nurs., Ghent, Belg., Cat. 1867, without description; Lebas, Rev. Hort. 1868: 320. 1868, with description). Flowers white with deep pink outer petals, single. Belgian cultivar, selected before 1867.

'Nivea Intus Kermesina' (Späth Nurs., Berlin, Germ., Cat. 1887). Flowers white flecked with rose-pink, single. Origin unknown, before 1887.

'Orange Scarlet' (C. japonica Orange Scarlet, Ellwanger & Barry Nurs., Rochester, N. Y., Cat. 1867) = 'Flore Rubra Aurantiaca'.

'Ormond Crimson' (Harrison, Handb. Trees & Shrubs South. Hem. 87. 1959). Flowers deep red, double. Selection of the Ormond Plant Farm, Ormond, Australia, before 1959. Named for its place of origin. This is a seedling of 'Falconnet Charlet'.

'Ormond Scarlet' (Harrison, Handb. Trees & Shrubs South. Hem. 87. 1959). Flowers scarlet-red, double. Selection of the Ormond Plant Farm, Ormond, Australia, before 1959. Named for its place of origin. This is a seedling of 'Falconnet Charlet'.

'Pacific Red' (C. lagenaria Pacific Red, Natorp Nurs., Cincinnati, Ohio, Cat. 1956). Flowers pink to red, single; fruits orange shaped, umbilicate. Selection of the Natorp Nursery, before 1956.

'Papeleui' (Cydonia japonica Papeleui Lemaire, Ill. Hort. 7: 260. f. 2. 1860). Flowers creamy yellow bordered pink, single; fruits orange shaped, umbili-
cate. Belgian selection named for Adolf Papeleu, horticulturist at Ledeberg, Belgium, who introduced most of Moerloose's selections, 1860.

'PEDUNCULATA' (C. japonica pedunculata Carrière, Rev. Hort. 1877: 192. f. 34. 1877). Flowers rosy red, single; fruits pear shaped, umbilicate, "borne on a peduncle about 15 mm. long." The long peduncle, a character relatively common to a great many cultivars, indicates that the fruit came from summer flowers.


'Permesina semi-plena' (Cult. at Longwood Gard., Kennett Square, Pa., and at the Nat. Arb., Washington, D. C.) = 'KERMESINA SEMIPLENA'.


'Phyllis Moore' (Krüssmann, Deutsche Baumsch. 4(4): 88. 1952) = 'PHYLIS MOORE'.

'Pink' (Princeton Nurs., Princeton, N. J., Cat. 1938) = 'ROSEA SEMIPLENA'.


'Piriformis' (C. japonica piriformis Mouillefert, Traité Arb. & Arbriss. 1: 540. 1892) = 'PYRIFORMIS'.

'Plena' (Cydonia japonica plena Prince Nurs., Flushing, N. Y., Cat. 1844) = 'RUBRA PLENA'.

'Princeps' (Cydonia japonica princeps Veitch Nurs., Kingston Hill, Engl., Cat. 1867-68). Flowers deep scarlet-red, single. Probably an English cultivar, before 1867. This is not a synonym of 'CARDINALIS'.

'Princess Emile Sontza' (C. japonica Princesse Emile Sontza, Ellwanger & Barry Nurs., Rochester, N. Y., Cat. 1867) = 'PRINCESSE EMILIE SOUTZO'.

'Princesse Emilie' (C. japonica Princesse Emilie, Parsons Nurs., Flushing, N. Y., Cat. 1873) = 'PRINCESSE EMILIE SOUTZO'.


'Purpurea' (C. japonica purpurea Simon-Louis Nurs., Metz, Fr., Cat. 1886-87, without description; ibid., Cat. 1900-01, with description) = 'ATROSANGUINEA'.

'PYRIFORMIS' (C. lagenaria pyriformis Camus, Arb., Arbust. & Arbriss. Orn. 39. 1923). Flower color unknown; fruits pear shaped. Origin unknown, before 1892. The name was spelled at first 'Piriformis', then corrected to 'Pyriformis'.

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'Red' (C. japonica red, Parsons Nurs., Flushing, N. Y., Cat. 1875, without description) = 'Rubra'.

'Red Ripples' (Strubbling Nurs., Merced, Calif., Wholesale Price List 1958) = 'Red Ruffles'.

'Red Ruffles' (Clarke Nurs., San Jose, Calif., Wholesale Price List 1951). Branches almost spineless; flowers red, single; fruits ovoid, umbilicate. Selection of W. B. Clarke, introduced 1951. Plant patent no. 941 taken on May 16, 1950. Named 'Red Ruffles' because the overlapping petals produce a "ruffled" effect. The name is registered.²


'Red Upright' (Burwell Nurs., Columbus, Ohio, Price List 1961) = 'Rubra'.

'Rino' (Ishii, Engei Shokubutsu Zufu 6, no. 1136, var. 12. 1930–34. In the United States it is called 'Contorta'.

'Rosalba' (Cydonia japonica rosalba Van Houtte, Flore Serres 14: pl. 1403. 1861) = 'Alba Cincta'. The name appearing under the plate is 'Rosalba' while in the title the given name is 'Albo-cincta'.


'Rosea' (Pyrus japonica rosea Van Houtte Nurs., Ghent, Belg., Cat., 1849, without description; Lebas, Rev. Hort. 1868: 320. 1868, with description) = 'Umbilicata'.

'Rosea flora pleno' (C. lagenaria rosea flora pleno Hillier Nurs., Winchester, Engl., Cat. 1958–59) = 'Rosea Plena'.

'Rosea flore plena' (C. japonica rosea flore plena Waterer's Nurs., Twyford, Engl., Cat. 1950–51) = 'Rosea Plena'.

'Rosea grandiflora' (C. japonica rosea grandiflora Van Houtte Nurs., Ghent, Belg., Cat. 1869, without description; Clarke Nurs., San Jose, Calif., Gard. Aristocrats 1934: 15. 1934, with description). Flowers white, white-and-pink with lemon to rose-pink, single; fruits apple shaped, slightly ribbed, umbilicate. Origin unknown, before 1869.

'Rosea grandiflora semiplena' (Späth Nurs., Berlin, Germ., Cat. 1889) = 'Rosea Semiplena'.

²For a number of years the American Association of Nurserymen performed the service of registering the names of cultivars proposed by American horticulturists. Each cultivar so registered was assigned a number which is often cited in publications as “AAN no. —.” In 1958 the Arnold Arboretum assumed this function doing so on behalf of the American Association of Botanical Gardens and Arboreums, designated as the National Registration Authority for special groups of woody cultivated plants by the American Horticultural Society. While so designated the Arnold Arboretum will accept for purposes of registration the names proposed for cultivars in taxa not already assigned to other National or International Registration Authorities. Cultivar names which are to be registered are not assigned numbers but are indicated as “registered” and are recorded in lists published at irregular intervals in issues of ARNOLDIA.
'ROSEA PLENA' (Cydonia japonica rosea plena Anonymous [list of C. Baltet], Garden 13: 144. 1878, without description; Carrière, Rev. Hort. 1886: 182. 1886, with description). Flowers pink to coral-pink, semidouble; fruits ovoid, ribbed. Selection of Otto Froebel, Zurich, Switzerland, before 1878. This is not a synonym of 'FALCONNET CHARLET'.


'Rosepink' (C. japonica rosepink, Leonard Nurs., Piqua, Ohio, Cat. 1934) = 'UMBILICATA'.

'Rosepink' (Cydonia japonica rosepink, Leonard Nurs., Piqua, Ohio, Cat. 1937) = 'MARMORATA'.

'RUBRA' (C. japonica rubra L. Leroy Nurs., Angers, Fr., Cat. 1872). Flowers bright red, single. This is probably the original form of Chaenomeles speciosa, imported by Banks in 1796, from Japanese gardens. The first name given to this cultivar, 'Rubriflora', has been replaced by 'RUBRA'.


'RUBRA GRANDIFLORA' (C. japonica rubra grandiflora Van Houtte Nurs., Ghent, Belg., Cat. 1867, without description; Lebas, Rev. Hort. 1868: 320. 1868, with description). Flowers large, deep crimson-red, single; fruits apple or orange shaped, umbilicate. Selection of Moerloose, Ledeberg, Belgium, before 1857, under the name 'Grandiflora rubra'. This is not a synonym of 'BLOOD RED'.


'Rubra pleno' (Cydonia japonica rubra pleno Prince Nurs., Flushing, N. Y., Cat. 1856) = 'RUBRA PLENA'.

'RUBRA SEMIPLENA' (Cydonia japonica rubra semiplena Lemoine Nurs., Nancy, Fr., Cat. no. 90. 1881, without description; Parsons Nurs., Flushing, N. Y., Deser. Cat. no. 38-39 [prob. 1887-89], with description). Flowers red, semidouble. Origin unknown, before 1887.

'Rubriflora' (Cydonia speciosa var. a rubriflora Guimpel et al., Abbild. Fremd. Holzg. 1: 88, pl. 70. 1825) = 'RUBRA'.

'Rubro-aurantiaca' (Cydonia japonica rubro-aurantiaca Lemaire, Ill. Hort. 3: 107. 1856) = 'AURANTIACA SEMIPLENA'.

'Rubro plena' (Pyrus japonica rubro plena Parsons Nurs., Flushing, N. Y., Cat. 1846) = 'RUBRA PLENA'.

'Rubro-sanguinea plena' (Cydonia japonica rubro-sanguinea plena Grignan, Rev. Hort. 1903: 20. 1903) = 'SANGUINEA PLENA'.

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'Salicifolia' (C. japonica salicifolia Verschaffelt Nurs., Ghent, Belg., Cat. 1876–77, without description; Letellier Nurs., Caen, Fr., Cat. 1897, with description). With “willow-like leaves.” Flower color and origin unknown, before 1876.

'Sanguinea flore pleno' (Van Geert Nurs., Anvers, Belg., Cat. 1893, without description; Sheridan Nurs., Clarkson, Can., Cat. 1941, with description) = 'Sanguinea Plena'.

'Sanguinea multiflora’ (Carrière, Rev. Hort. 1886: 182. 1886) = 'Sanguinea Plena Multiflora'.

'Sanguinea plena' (Cydonia japonica sanguinea plena Froebel Nurs., Zurich, Switz., Cat. no. 90. 1880, without description; ibid., Cat. no. 124. 1899, with description). Flowers rosy red, semidouble. Selection of Otto Froebel, before 1880.


'Sarmentosa’ (C. japonica sarmentosa Beissner et al., Handb. Laubh.-Ben. 182. 1903, without description). Cultivated at the Forest Academy of Munich, Germany, since 1869. Probably a German cultivar. Flower color and origin unknown, before 1869.

'Scarlet’ (C. japonica scarlet, Ellwanger & Barry Nurs., Rochester, N. Y., Cat. 1867) = 'Rubra’.

'Semi-alba-pleno’ (C. japonica semi-alba-pleno Ellwanger & Barry Nurs., Rochester, N. Y., Cat. 1886) = 'Alba Semiplena’.

'Semi-plena’ (C. japonica semi-plena Van Houtte Nurs., Ghent, Belg., Cat. 1869, without description; Simon-Louis Nurs., Metz, Fr., Cat. 1900–01, with description) = 'Rubra Semiplena’.

'Semipleno’ (C. japonica semipleno Vollert Nurs., Lübeck, Germ., Cat. 1899–1900, without description) = 'Rubra Semiplena’.

'Serotina’ (C. japonica serotina André, Rev. Hort. 1894: 424. f. 155, 156. 1894). Flowers red, blooming in summer, arranged in corymbs, single; fruits borne on long peduncles. The shrub bearing these few flowers and fruits in the garden of Mr. Morel, horticulturist at Lyon-Vaise, France, in 1893 should not have been named as a new variety. Summer flowers disposed in corymbs, and fruits with long peduncles appear each year on most cultivars when heat and humidity are sufficient. This is a seasonal form rather than a cultivar.
'SHIRATAUM' (Taranto Gard., Pallanza, It., List of Seeds 1956–57). Leaves narrow; flowers white, single. This cultivar came originally from K. Wada, Hakoneya Nurseries.

'SIMIRENKIANA' (C. japonica Simirenkiana Simirenko, Rev. Hort. 1888: 518. 1888). Leaves white; flowers pale red, single. L. Simirenko noted in his garden at Goroditsche, Russia, for about 20 years, a branch of Chaenomeles speciosa (as C. japonica) abnormally deprived of chlorophyll. Wishing to propagate a shrub with completely white leaves, he grafted the branch on normal understock. Before waiting long enough for a failure, since a plant without chlorophyll can not synthesize food, Simirenko gave it his own name. This "variety" has not been heard of since.


'SIMONII' (C. japonica Simonii André, Rev. Hort. 1883: 275. 1883). Flowers small, dark crimson-red, often with green marks, semidouble; fruits small, irregularly ovoid, ribbed, calyx accrescent. Due to its slow growth and semihorizontal habit, 'SIMONII' has been recommended as a dwarf for rock gardens, and assigned to the SUPERBA group. It reaches 5 feet in height and belongs to C. speciosa in spite of its small leaves. This cultivar was raised from seed of 'ATROSANGUINEA' before 1882, and named for the Simon-Louis Nursery, Metz, France, where it originated. This is not a synonym of 'ATROSANGUINEA', or of 'RUBRA'. Similar to 'ATROSANGUINEA PLENA'.

'Simoni rubra' (C. japonica Simoni rubra Letellier Nurs., Caen, Fr., Cat. 1909–10) = 'SIMONII'.

'Simonis' (C. japonica simonis Van Geert Nurs., Anvers, Belg., Cat. 1893, without description) = 'SIMONII'.

'Simplex alba' (C. japonica simplex alba Parsons Nurs., Flushing, N. Y., Descr. Cat. no. 38–39 [prob. 1887–89] = 'ALBA SIMPLEX'.

'Snow' (Clarke Nurs., San Jose, Calif., Gard. Aristocrats 12: 12. 1945). Flowers large, white, single; fruits apple shaped, calyx accrescent. Selection no. DN–10 of W. B. Clarke, introduced 1945. The name is registered.


'Snow White' (C. lagenaria Snow White, Light Tree Nurs., Richland, Mich., Price List 1958, without description) = 'Snow'.


'SPLENDENS' (C. japonica splendens Van Geert Nurs., Anvers, Belg., Cat. 1893, without description). Flower color and origin unknown, before 1893.

‘STRIATA’ (C. japonica striata A. Leroy Nurs., Angers, Fr., Cat. 1873, without description). Flower color and origin unknown, before 1873.

‘Sulphurea’ (C. japonica sulphurea Desfossé-Thuillier Nurs., Orléans, Fr., Cat. 1874, without description; Goldring, Garden 40: 127. 1891, with description) = ‘SULPHUREA PERFECTA’.

‘Sulphurea aurea’ (Dickinson Nurs., Chatenay, Fr., Cat. 1904–05, without description) = ‘SULPHUREA PERFECTA’.


‘Taroyishi’ (cult. at the Ida Cason Callaway Gard., Pine Mountains, Ga.) = ‘TAIOH-NISHIKI’.

‘TATSUGASHIRA’ (Ishii, Engei Shokubutsu Zufu 6, no. 1136, var. 11. 1930–34). Branches creeping on the ground, very spiny; leaves willow-like; flowers orange-red, single; fruits small, orange shaped. In Japanese gardens. Tatsugashira means dragon’s head.


‘Tortuosa’ (C. eugenioides var. tortuosa Nakai, Bot. Mag. Tokyo 37: 72. 1923) = ‘CONTORTA’. The name ‘Tortuosa’, used by Nakai for a Japanese cultivar originally named ‘Rinho’, has been replaced by the widely used name of ‘Contorta’. The name ‘Tortuosa’ is retained for another cultivar belonging to the SUPERBA group.


trichogyna (Chaenomeles trichogyna Nakai, Bot. Mag. Tokyo 30: 23. 1916) = C. speciosa. Nakai, Bot. Mag. Tokyo 32: 146. 1918, says that “it is to be considered as the alternate name” of ‘Cardinalis’ which originated in European gardens while C. trichogyna was described from a specimen collected in Korea.
'Umbellata' (C. lagenaria umbellata Jackman Nurs., Woking, Engl., Cat. 1936-37) = 'UMBILICATA'.

'Umbellicata' (C. japonica umbellicata Kelways Nurs., Langport, Engl., Cat. 1928) = 'UMBILICATA'.

'Umbellicata rosea' (C. japonica umbellicata rosea Van Houtte Nurs., Ghent, Belg., Cat. 1867, without description) = 'UMBILICATA'.

'Umbicillata' (Cydonia japonica umbicillata Prince Nurs., Flushing, N. Y., Cat. 1856) = 'UMBILICATA'.

'Umbicillata rosea' (C. japonica umbicillata rosea Prince Nurs., Flushing, N. Y., Cat. 1860) = 'UMBILICATA'.


'Umbilicata macrocarpa' (Cydonia japonica umbilicata macrocarpa Papeleu Nurs., Ledeberg, Belg., Cat. 1852-53) = 'MACROCARPA'.

'UMBILICATA NANA' (Cydonia japonica umbilicata nana Papeleu Nurs., Ledeberg, Belg., Cat. 1852-53). Shrubs dwarf, almost spineless; flowers orange-red, single. Selection of Moerloose, Ledeberg, Belgium, before 1852.

'Umbilisata' (Kluis & Koning Nurs., Boskoop, Neth., Cat. 1912, without description) = 'UMBILICATA'.

'Umbilicata rosea' (Bunyard, The Planters' Handbook, 86, 1908) = 'UMBILICATA'.

'Upright' (Adam Nurs., Westfield, Mass., Cat. 1957) = 'RUBRA'.


'Upright Red' (Burr Nurs., Manchester, Conn., Cat. 1958-59, without description) = 'RUBRA'.

'Upright Spitfire' (Wayside Gard., Mentor, Ohio, Cat. 1950) = 'SPITFIRE'.

'Upright White' (Burr Nurs., Manchester, Conn., Cat. 1958-59, without description) = 'WHITE UPRIGHT'.

'VAN AERSCHODTI' (Van Geert Nurs., Anvers, Belg., Cat. 1893, without description). Flower color and origin unknown, before 1893.

'Variabilis tricolor' (A. Leroy Nurs., Angers, Fr., Cat. 1873, without description). Flower color and origin unknown, before 1893.

'Variegata' (Cydonia japonica variegata Van Houtte Nurs., Ghent, Belg., Cat. 1869, without description). Flower color and origin unknown, before 1869.

'Variegatis' (C. japonica variegatis Beissner et al., Handb. Laubh.-Ben. 1903: 182. 1903, without description) = 'FOLIIS VARIEGATIS'.

'Versicolor' (C. japonica versicolor Osborn Nurs., Fulham, Engl., Cat. 1870, without description; Späth Nurs., Berlin, Germ., Cat. 1887, with description)
tion). Flowers white and two shades of pink, single; fruits ovoid, umbilicate. Origin unknown, before 1870.

‘Versicolor lutea’ (*C. japonica versicolor lutea* Van der Bom Nurs., Oudenhush, Neth., Cat. 1907, without description) = ‘VERSICOLOR LUTESCENS’.

‘VERSICOLOR LUTESCENS’ (*C. japonica versicolor lutescens* A. Leroy Nurs., Angers, Fr., Cat. 1865, without description; ibid., Cat. 1873, with description). Flowers salmon-pink suffused with orange-red, single; fruits irregularly obovoid, umbilicate. Origin unknown, before 1865.


‘VERSICOLOR SEMIPLENA’ (*Cydonia japonica versicolor semiplena* Froebel Nurs., Zurich, Switz., Cat. no. 90. 1880, without description; ibid., Cat. no. 124. 1899, with description). Flowers white-and-pink, semidouble. Selection of Otto Froebel, before 1880.

‘White’ (Strong Nurs., Brighton, Mass., Cat. 1874) = ‘CANDIDISSIMA’.


‘Yellow’ (*C. japonica* yellow, Hoyt Nurs., New Canaan, Conn., Cat. 1897) = ‘LUTEA’.

‘Yuga’ (name in an unpublished list of Dr. H. R. Kemmerer, Univ. of Ill.) = ‘YUYO’.


**Chaenomeles × californica** Clarke, Garden Aristocrats 7: 13. 1940. (*C. cathayensis × superba*). **CALIFORNICA** group.

Shrubs usually 6 feet high. Branches stiff, erect as in *C. cathayensis*, but more numerous, strongly armed with spurs. Young shoots sparsely pubescent; those of the second year with a few warts. Leaves lanceolate, often showing a light fulvous tomentum on the under surface when young, the serration of the margins intermediate between that of the parents. Flowers large, usually pink or rosy red, or often showing a blend of the two. Fruits medium to large, ovoid, apple or orange shaped. Not hardy north of Zone VI, like one of its parents, *C. cathayensis*.3

3 According to the International Code of Nomenclature for Cultivated Plants “a collective epithet in Latin form must be published with a Latin diagnosis and in combination with a generic name.” We provide here the Latin diagnosis to complete Clarke’s English description, and designate a lectotype chosen from among one of the four cultivars, ‘Enchantress’, ‘Masterpiece’, ‘Rosemary’, and ‘Sunset Glow’, first cited by Clarke in 1940, as included in his new group **CALIFORNICA**.

[ 50 ]

The first cultivars of this group were initially selected in 1938 by the late Walter B. Clarke from the cross of C. cathayensis × superba 'Corallina' and were offered by him for sale in 1939, under "Cathayensis hybrids." Clarke changed the name in 1940 to Chaenomeles californica.


'Aurora' (Clarke Nurs., San Jose, Calif., Wholesale Price List May 1, 1953) = 'Dawn'. The name 'Aurora' has already been applied to an older cultivar of C. speciosa which is still widely cultivated. We propose to call Clarke's 'Aurora' by the name of 'Dawn', the English translation of the word 'Aurora'.

'California' (Clarke Nurs., San Jose, Calif., Wholesale Price List Nov. 15, 1948). Flowers pink and rose-pink, single; fruits orange shaped. Selection no. 327 of W. B. Clarke, introduced 1948. The name is registered.

'Californica' (Clarke Nurs., San Jose, Calif., Gard. Aristocrats 7: 13. 1940). No. 327 = 'California'. 'Californica' is the name of the hybrid group and does not apply to any cultivar in particular.

'Cardinal' (Clarke Nurs., San Jose, Calif., Wholesale Price List Dec. 1, 1947). Flowers crimson-red, single. Selection of W. B. Clarke, probably no. DR-53, introduced 1947. This is a seedling of 'Rosemary'. The name is registered.


'Clarke's Giant Red' (Clarke Nurs., San Jose, Calif., Wholesale Price List May 1, 1956). Branches straggling, low in habit for a member of the Californica group, almost spineless; flowers very large, rosy red, single; fruits orange shaped, calyx accrescent. Selection of W. B. Clarke, introduced 1956. Named for the Clarke Nursery, San Jose, California. This is probably a tetraploid.


'Dawn' (formerly 'Aurora', a name retained for another cultivar). Flowers soft pink and carmine-rose, single. Selection of W. B. Clarke, San Jose, California, probably no. E92-4, introduced in 1953 under the name 'Aurora'.

'Deep Salmon' (Bonnell Nurs., Seattle, Wash., Cat. 1948) = 'Rosemary'.
'Enchantment' (Harrison, Handb. Trees & Shrubs South. Hem. 87. 1959) = 'Enchantress'.

'Enchantress' (C. × californica Enchantress, Clarke Nurs., San Jose, Calif., Gard. Aristocrats 7: 14. 1940). Flowers light and dark pink, single; fruits ovoid to pear shaped, umbilicate. Award of Merit of the Royal Horticultural Society on April 13, 1943. The name is registered.


'Masterpiece' (C. × californica Masterpiece, Clarke Nurs., San Jose, Calif., Gard. Aristocrats 7: 14. 1940). Flowers rose-pink, single; fruits large, ovoid. Selection no. 332 of W. B. Clarke, introduced 1940. The name is registered.

'Nasturtium' (Clarke Nurs., San Jose, Calif., Wholesale Price List May 1, 1951). Flowers large, "nasturtium" red, single. Selection of W. B. Clarke, probably no. L 70/30, introduced 1951. Award of Merit of the California Horticultural Society in 1950. The name is registered.

'Orange Red' (Bonnell Nurs., Seattle, Wash., Cat. 1948) = 'Sunset Glow'.

'Pink Beauty' (C. × californica Pink Beauty, Clarke Nurs., San Jose, Calif., Gard. Aristocrats 8: 15. 1941). Flowers light and dark pink, single; fruits orange shaped. Selection of W. B. Clarke, introduced 1941. The name is registered.

'Rosy Morn' (Clarke Nurs., San Jose, Calif., Wholesale Price List May 1, 1951). Flowers soft pink, single; fruits apple shaped, umbilicate. Selection of W. B. Clarke, probably no. L 70/57, introduced 1951. The name is registered. This is probably the product of a backcross of C. × californica to C. × superba.


'Sunset Glory' (Krüssmann, Deutsche Baumsch. 4(4): 88. 1952) = 'Sunset Glow'.

‘Sunset Gold’ (cult. at the Univ. of Wash., Seattle, Wash.) = ‘Sunset Glow’.

Chaenomeles × clarkiana (new hybrid group).
(C. cathayensis × japonica). **Clarkiana** group.

Shrubs of low growth, maximum size unknown. Branches erect-spreading, covered with spines more numerous and longer than in **C. japonica**, more slender than in **C. cathayensis**. Young shoots pubescent; those of the second year slightly verruculose. Leaves and serration intermediate in shape and size between the two parents (small and narrow in ‘Cynthia’, large and broad in ‘Minerva’). Flowers large, pink to rosy red. Fruits medium sized, apple to orange shaped. Not hardy north of Zone VI.


This hybrid group is named for the late Walter B. Clarke, nurseryman in California, who produced the hybrids. In 1945, he selected from this complex two cultivars, calling them “Miniature Cathayensis hybrids.”

Flowers pink and rosy red, single; fruits orange shaped, upper depression terminating in a narrow tip. Selection of W. B. Clarke, probably no. E.87–12, introduced in 1947. The name is registered.

‘MINERVA’ (Clarke Nurs., San Jose, Calif., Wholesale Price List May 1, 1951).
Flowers pink to rosy red, single; fruits apple shaped, irregularly ribbed. Selection of W. B. Clarke, probably no. E.87–10, introduced in 1951. The name is registered under no. 108 at the Association of American Nurserymen.

Cydonia maulei var. superba Frahm, Gartenw. 2: 214. 1898. (C. japonica × speciosa). **Superba** group.

Shrubs usually up to 4–5 feet high. Branches numerous, erect-spreading, with slender spines. Young shoots covered with short and scabrous tomentum; those of the second year verruculose. The amount of the tomentum is very variable, and when barely present may indicate a backcross to **C. speciosa**. Leaves intermediate in shape, size, and serration between the parents, but usually more like **C. japonica**. Flowers medium sized, white, pink, orange, or red. Fruits mostly apple shaped, larger than those of **C. japonica** and ripening at a somewhat later date.4

*C. × superba* (Frahm) Rehder was validly published without a Latin diagnosis or indication of a type specimen, requirements which became mandatory from 1935 and 1958, respectively. To allow comparison to be made between the different hybrid groups, we provide the Latin diagnosis and designate a lectotype.

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C. × superba was not originally recognized as a hybrid, but rather as a variety of C. japonica (as Cydonia maulei) and was described as such in 1898 by Frahm. Rehder regarded the cultivar ‘SUPERBA’ as the type of this hybrid group. According to the International Code of Nomenclature for Cultivated Plants, ‘SUPERBA’ also is to be regarded as the first cultivar in this complex, in spite of the fact that ‘Knap Hill Scarlet’, another member of the Superba group, originated seven years earlier.


‘ALBA’ (Cydonia japonica maulei alba Froebel Nurs., Zurich, Switz., Cat. no. 124. 1899). Branches decumbent; flowers creamy white, single; fruits apple shaped or irregularly ovoid, calyx accrescent. Selection of Otto Froebel, introduced 1899.


‘Andenken an Ernest Finken’ (cult. by Darthuizer Nurs., Boskoop, Neth.) = ‘ERNST FINKEN’.


‘Apricot’ (C. lagenaria Apricot, Krüssmann, Laubh., 72. 1937). The French name ‘Abricot’ has been translated into German and English = ‘ABRICOT’.

‘Atrosanguinea’ (Cydonia japonica maulei atrosanguinea Froebel Nurs., Zurich, Switz., Cat. no. 124. 1899) = ‘OTTO FROEBEL’. The name ‘Atrosanguinea’ is preoccupied by that of an older cultivar of C. speciosa, still in cultivation. According to the International Code of Nomenclature for Cultivated Plants this later ‘Atrosanguinea’ must be renamed. We propose to call it ‘Otto Froebel’ for its originator.


‘BENICHIDORI’ (Cydonia japonica Benichidori, Hakoneya Nurs., Numazu-shi,

'Boule de Feu' (Turbat Nurs., Orléans, Fr., Cat. 1916-17). Flowers salmon-to coral-pink, single; fruits small, irregularly apple shaped, narrowly umbilicate. This is the product of a cross made in the Barbier Nursery, Orléans, France, between 'Baltzii' and 'Maulei', before 1913.

'Boule de Feu' (Kingsville Nurs., Kingsville, Md., Cat. 1947) = 'Boule de Feu'.

'Bunyardii' (Pyrus japonica Bunyardii Bunyard, The Planters' Handbook 86. 1908). Flowers salmon-pink, single. Selection of George Bunyard, Maidstone, England, introduced in 1907. This is the product of a cross between 'Maulei' and 'Umbilicata' (as 'Rosea').

'Camélo' (Clarke Nurs., San Jose, Calif., Wholesale Price List May 1, 1956). Branches almost spineless; flowers salmon- to coral-pink, double; fruits irregularly orange shaped, calyx accrescent. Selection of W. B. Clarke, introduced 1956.

'Charming' (Clarke Nurs., San Jose, Calif., Wholesale Price List May 1, 1951). Branches almost spineless; flowers pink to vermilion; fruits irregularly apple shaped. Selection of W. B. Clarke, probably no. DC-13, introduced in 1950.

'Chosan' (Krüssmann, Handb. Laubh. 1: 306. 1960). This is a misspelling for 'Choshan' which is a synonym of 'Yaegaki'.

'Choshan' (Anonymous, Jour. Roy. Soc. 75: lxxii. 1950) = 'Yaegaki'. An unnamed Japanese Quince imported from Japan by J. O. Sherrard, Newbury, England, was so appealing to him that he tried to find out its name through a Japanese nursery who thought it was 'Choshun' misspelled 'Choshan'. With its small apricot double flowers, it does not correspond to 'Choshun' which has large terra cotta-red, single flowers.


'Columbia' (Barbier Nurs., Orléans, Fr., Cat. 1896, with description of the fruits only; Späth Nurs., Berlin, Germ., Cat. 1904-05, with description of the flowers). Flowers pink to rosy red, single, often unisexual, mostly female; fruits less than 2 inches in diameter (Barbier says 8 to 10 inches; Turbat Nurs., Orléans, Fr., Cat. 1910-11 says 15 to 30 inches in circumference), irregularly apple shaped, umbilicate. Ludwig Späth says "American variety," which can not be the case in spite of its name. 'Columbia' appeared in American nursery catalogues about 40 years after it was common in European nurseries. Origin unknown, before 1896.

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'Coral Beauty' (C. × superba Coral Beauty, Clarke Nurs., San Jose, Calif., Wholesale Price List Nov. 15, 1949). Branches almost spineless; flowers salmon- to coral-pink, single; fruits ovoid, calyx accrescent. Selection of W. B. Clarke, probably no. DC–16, introduced 1949. This is a seedling of 'CANDIDA'. The name is registered.

'Coral Glow' (Leonard Nurs., Piqua, Ohio, Cat. 1934) = 'CORALLINA'.

'Corallina' (C. japonica corallina Clarke Nurs., San Jose, Calif., Gard. Aristocrats 1934: 15. 1934). Flowers orange, single; fruits small, apple shaped. Selected by W. B. Clarke in the seedlings resulting from a cross of C. japonica × speciosa, introduced 1934. This cultivar has been crossed with C. cathayensis, producing as a result most of the cultivars of the CALIFORNICA group.

'Coral Sea' (C. × superba Coral Sea, Clarke Nurs., San Jose, Calif., Gard. Aristocrats 10: 15. 1943). Flowers salmon- to coral-pink, single; fruits orange shaped, upper depression terminating in a narrow tip. Selection of W. B. Clarke, probably no. DC–6, introduced 1943. This is a seedling of 'CANDIDA'. The name is registered.

'Crimson and Gold' (Clarke Nurs., San Jose, Calif., Gard. Aristocrats 6: 12. 1939). Shrubs dwarf and spreading; flowers dark crimson-red, single, early; fruits apple shaped, calyx accrescent. Selection of W. B. Clarke, probably no. 301, introduced 1939. 'CRIMSON AND GOLD' is the product of a cross between C. × superba 'Naranja' (as C. japonica alpina Naranja) and C. × superba 'Sanguinea' (as C. lagenaria sanguinea). It is named for the contrasting colors of the “crimson” petals with the “golden” stamens. The name is registered.

'Crimson and Red' (Cult. at the Landbouwhogeschool, Wageningen, Neth.) = 'CRIMSON AND GOLD'.


'Double Orange' (Cult. at the Arnold Arb., Jamaica Plain, Mass., from Toichi Domoto Nurs., Hayward, Calif., since 1942) = 'SUNSET'.


'Double Vermilion' (Clarke Nurs., San Jose, Calif., Gard. Aristocrats 1936: 8.


‘EARLY APPLE BLOSSOM’ (C. × superba Early Apple Blossom, Clarke Nurs., San Jose, Calif., Wholesale Price List Dec. 1, 1940). Flowers soft and deep pink, single, female only; fruits irregularly apple shaped, calyx accrescent. Selection of W. B. Clarke, probably no. 343, introduced 1940. The name is registered.


‘ECARLATE’ (Barbier Nurs., Orléans, Fr., Cat. 1913-14). Flowers “scarlet”-red, single. This is the product of a cross made in Barbier Nursery, between ‘BALTZII’ and ‘MAULEI’, before 1913.


‘ERNST FINKEN’ (C. × superba Ernst Finken, Ruys Nurs., Boskoop, Neth., Cat. 1959-60). Flowers fiery red, single; fruits apple shaped, calyx persistent. Selection of H. Finken, Rodenkirchen bei Köln, Germany, introduced in 1952.

‘ETNA’ (C. lagenaria Etna, Ruys Nurs., Dedemsvaart, Neth., Cat. 1953-54). Flowers scarlet-red, flat open, single; fruits apple shaped, umbilicate. Selection of K. Verboom, Boskoop, Netherlands, introduced in 1953. This is a seedling of ‘SIMONII’ pollinated by an unknown C. × superba. As a result of the backcrossing of a member of the SUPERBA group to C. speciosa, the leaves are more like those of C. speciosa.

‘EXTUS ACUMINEUS’ (cult. at Royal Botanic Gardens, Kew, Richmond, Surrey, Engl.). Known to us from sterile shrubs only. Flower color and origin unknown, before 1959.


‘FIRE DANCE’ (C. lagenaria Fire Dance, Deutsche Baumsch. 5(7): 188. 1953). Flowers red, single; fruits apple or pear shaped, umbilicate. Selection of K. Verboom, Boskoop, Netherlands; introduced in 1953. This is a seedling of ‘SIMONII’ pollinated by an unknown C. × superba. It received a First Class Certificate in the Netherlands.

‘Fire Dancer’ (cult. at the Royal Botanic Gardens, Kew, Richmond, Surrey, Engl.) = ‘FIRE DANCE’.
'Foliis Rubris' (C. japonica foliis rubris Späth Nurs., Berlin, Germ., Cat. 1887). Flowers sallow coral-pink, single; fruits ovoid, umbilicate. Origin unknown, probably selection of Ludwig Späth, before 1887. This cultivar was named 'Foliis rubris' because of the brown-reddish color of its young shoots and leaves. This character, found also in most of the other cultivars, disappears when the leaves mature.

'Fructico Alba' (Wister, Swarthmore Pl. Notes 1955: 212. 1955, without description). Flowers white tinted with pink, single; fruits obovoid, calyx accrescent. Origin unknown, before 1942. The fruits which should be white, according to the cultivar name, are not paler than in many other cultivars.

'Fructo alba' (Wister, Swarthmore Pl. Notes 1942: 128. 1942, without description) = 'Fructico Alba'.

'Fruantu alba' (Colby, Trans. Ill. Acad. Sci. 21: 181. 1929) = 'Fructico Alba'.


'George Landis' (cult. at the George Landis Arb., Esperance, N. Y.). Flowers sallow orange-red, single; fruits large, bright orange, apple shaped, umbilicate. This cultivar was brought by George Landis, for whom it is named, from a garden at Troy, New York, in 1946. This is a new cultivar previously undescribed and its name is registered.


'Grandiflora' (Kingsville Nurs., Kingsville, Md., Cat. 1947) = 'Grandiflora Rosea'.

'Grandiflora Perfecta' (Cydonia maulei grandiflora perfecta St. Olbrich, Gartenw. 4: 270. 1900). Flowers cinnabar-red, single or slightly semidouble. Selection of Froebel Nursery, Zurich, Switzerland, introduced in 1900.

'Grandiflora perfecta' (C. japonica grandiflora perfecta Colby, Trans. Ill. Acad. Sci. 21: 183. 1929) = 'Perfecta'.

'Grandiflora Rosea' (Cydonia maulei grandiflora rosea St. Olbrich, Gartenw. 4: 270. 1900). Flowers creamy yellow to soft pink, single. Selection of Otto Froebel, Zurich, Switzerland, introduced in 1900.

'Grenade' (Lemoine Nurs., Nancy, Fr., Cat. 1908). Flowers red-orange, single to semidouble; fruits small, globular, umbilicate. Selection of Victor Lemoine, introduced in 1908.


1961). Flowers pink and rosy red, semidouble. Selection no. 5 of Dr. A. Colby of the University of Illinois, introduced 1961.

'HI-NO-TSUASA' (Cydonia japonica Hi-no-Tsukasa, Hakoneya Nurs., Numazu-
K. Wada, Hakoneya Nurseries, before 1936. Hi-no-Tsukasa means scarlet
umbrella.

'HOLLANDIA' (C. lagenaria Hollandia, Krüssmann, Deutsche Baumsch. 5(7):
188. 1953). Flowers scarlet-red, single; fruits apple shaped, umbilicate.
Selection of K. Verboom, Boskoop, Netherlands, introduced in 1953. This is a
seedling of 'SIMONII' pollinated by an unknown C. × superba.

'Incende' (Kingsville Nurs., Kingsville, Md., Cat. 1947) = 'INCENDIE'.

'INCENDIE' (Lemoine Nurs., Nancy, Fr., Cat. 1913-14). Flowers scarlet-red,
semidouble; fruits small, irregularly apple shaped, umbilicus large and
pointed. Selection of Victor Lemoine, introduced in 1912. The name is
registered.


Shrubs, very compact; flowers scarlet-red, single; fruits irregularly apple
shaped, umbilicate. Selection of Willis Nursery, introduced in 1957.

description). Flowers small, bright red, single. Selection of C. H. Taudevin,

Low growing shrubs; flowers pure white, flat open, single; fruits ovoid, calyx
accrecent. Selection of Harvey M. Templeton, Phytotektor, introduced in
1961. This is a white sport of 'TEXAS SCARLET' which appeared in 1959. The
name is registered.

'JULIET' (Clarke Nurs., San Jose, Calif., Wholesale Price List Dec. 1, 1940).
Flowers salmon- to coral-pink, single; fruits ovoid, umbilicate. Selection no.
325 of W. B. Clarke, introduced in 1940. Named for the late Mrs. Juliet
Scannavino who found it particularly "charming."

'Karl Ramke' (in an unpublished list of the Bailey Hortorium, from John Con-
non Nurs., Waterdown, Can.) = 'ANDENKEN AN KARL RAMCKE'.

'Kinjishi' (cult. at the Morton Arb., Lisle, Ill., from Hakoneya Nurs., Numazu-
shi, Jap., since 1939). Flowers red-orange, double. Selection of K. Wada,
Hakoneya Nurseries, before 1939. Kinjishi means golden lion.

'KINJISHI'.

'Knap Hill' (Kingsville Nurs., Kingsville, Md., Cat. 1947) = 'KNAP HILL
SCARLET'.

'KNAP HILL SCARLET' (C. japonica Knap Hill Scarlet, Goldring, Garden 40: 127.
1891, without description; Becket, Garden 71: 262. 1907, with description).
Flowers large, red-orange, single; fruits small, strongly ribbed, umbilicate.

‘KNAP HILL SEEDLINGS’ (C. japonica Knap Hill Seedlings, Knap Hill Nurs., Woking, Engl., Cat. 1937). Flowers in several shades of scarlet and pink. This is not a clone, but seedlings of ‘KNAP HILL SCARLET’ selected at the Knap Hill Nursery, before 1937.


‘MANDARIN’ (Clarke Nurs., San Jose, Calif., Wholesale Price List Dec. 1, 1947). Flowers orange, single; fruits ovoid or obovoid, calyx accrescent. Selection no. DC–7 of W. B. Clarke, introduced in 1947. Named for the color, mandarin-red, of its flowers. The name is registered.

‘MARGARET ADAMS’ (Clarke Nurs., San Jose, Calif., Wholesale Price List Nov. 15, 1949). Flowers soft coral-pink, single; fruits apple shaped. Selection of W. B. Clarke, probably no. DC–24, introduced in 1949. The name is registered.


‘MOUNT SHASTA’ (see ‘Mt. Shasta’). Flowers large, white-and-pink tinted with lavender, single. Selected by W. B. Clarke in 1949, introduced in 1951. The name is registered.

‘Mt. Shasta’ (Clarke Nurs., San Jose, Calif., Wholesale Price List May 1, 1951) = ‘MOUNT SHASTA’. According to a recommendation in the International Code of Nomenclature for Cultivated Plants, cultivar names should not begin with an abbreviation.


‘NICOLINE’ (Anonymous, Jaarb. Boskoop 1954: 116. 1954, without description; Grotendorst Nurs., Boskoop, Neth., Cat. 1960–61, with description). Flowers large, crimson-red, single to semidouble; fruits ovoid, slightly ribbed, umbilicate. Selection of Dr. S. G. A. Doorenbos, president of the International Dendrology Union, The Hague, Netherlands, introduced in 1956. This is a seedling of ‘INCENDIE’ pollinated by ‘ROWALLANE’ (as ‘Rowallane Seedling’) and according to Dr. Doorenbos, proves to be identical with ‘ULIDIA’.

Numazu-shi, Japan, introduced before 1939. Nishikichidon means dull brocade.

'Orange' (Lemoine Nurs., Nancy, Fr., Cat. 1908). Flowers red-'orange,' semidouble. Selection of Victor Lemoine, introduced in 1908.

'Otto Froebel' (formerly 'Atrosanguinea,' a name retained for another cultivar). Flowers blood-red, single. Selection of Otto Froebel, for whom it is named, introduced in 1899 under the name 'Atrosanguinea.' According to Froebel, it is not a synonym of 'Superba' from which it differs by brighter flowers.

'Perfecta' (C. × superba f. perfecta Rehder, Jour. Arnold Arb. 2: 59. 1920) = 'Grandiflora Perfecta'.

'Perfecta' (Clarke Nurs., San Jose, Calif., Wholesale Price List Nov. 15, 1935). Flowers creamy white tinged with pink, lemon, and green, to rose-pink, single; fruits small, apple shaped, umbilicate. Origin unknown, but cultivated at the Arnold Arboretum, Jamaica Plain, Mass., since 1905. Obtained from Spath Nursery, Berlin, Germany. This is the shrub grown nearly everywhere under the name 'Perfecta', in spite of the fact that Rehder's 'Perfecta' has red, single to semidouble flowers. We propose to keep the name 'Perfecta' for this cultivar with white-and-pink flowers and to call the red one 'Grandiflora Perfecta' as it was originally named.

'Pink Lady' (Clarke Nurs., San Jose, Calif., Wholesale Price List Nov. 15, 1946). Flowers pink to rose, single; fruits apple shaped, umbilicate. Selection of W. B. Clarke, probably no. DC-11, introduced in 1946. The name is registered.

'Pink Princess' (Corliss Nurs., Gloucester, Mass., Cat. 1957) = 'Pink Lady'.

'Porcelain Rose' (cult. at the U.S. Plant Introd. Station, Glenn Dale, Md.). Flowers small, white-and-pink with a lemon touch, semidouble; fruits apple shaped, umbilicate. Origin Glenn Dale, Maryland, before 1960. This is a new cultivar previously undescribed.


'Red Chief' (Clarke Nurs., San Jose, Calif., Wholesale Price List May 1, 1953). Flowers rosy red, double; fruits apple shaped, umbilicate. Selection of W. B. Clarke, introduced in 1953.


'Renny Mossel' (name from Dr. I. C. Dorsman, director Proefstation Boomkwerij, Boskoop, Neth.) = 'Fascination'.

'Rosea' (C. × superba f. rosea Rehder, Jour. Arnold Arb. 2: 59. 1920) = 'Grandiflora Rosea'.

'Rosea grandiflora' (cult. at the Holden Arb., Mentor, Ohio) = 'Grandiflora Rosea'.

'Rowallana' (Wister, Swarthmore Pl. Notes, 1942: 127. 1942) = 'Rowallane'.

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'Rowallane Seedling' (C. japonica Rowallane Seedling, Hillier Nurs., Winchester, Engl., Cat. 1947-48) = 'Rowallane'.


' Roxana Foster' (Clarke Nurs., San Jose, Calif., Wholesale Price List May 1, 1951). Flowers red-orange, single. Selection of W. B. Clarke, probably no. DN-95, introduced by the Thomas Bell Foster Nurseries, Houston, Texas, in 1951. Named for Mrs. Roxana Foster, mother of Thomas B. Foster. The name is registered.

'Rubrifolia' (Späth Nurs., Berlin, Germ., Cat. 1910-11) = 'Folius Rubris'.

'Ruby Glow' (C. × superba Ruby Glow, Clarke Nurs., San Jose, Calif., Wholesale Price List Dec. 1, 1947). Flowers red, single; fruits large, ovoid, calyx accrescent. Selection of W. B. Clarke, probably no. E.88-15, introduced in 1947. This must be a backcross of C. × superba to C. speciosa. The name is registered.


'Scarlet and Gold' (Sunningdale Nurs., Windlesham, Engl., Cat. 1961) = 'Crimson and Gold'.

'Semperflorens' (Hesse Nurs., Weener-Ems, Germ., Cat. 1908-09, without description; Turbat Nurs., Orléans, Fr., Cat. 1910-11, with description) = 'Columbia'. This cultivar was said by Hermann Hesse, in whose nursery it was selected in 1901, to be blooming a second time during the year, hence its name. It is in no way different from 'Columbia'.

'Sensational New Red' (Cole Nurs., Painesville, Ohio, Cat. 1942) = 'Cole's Red'.

'Shell Pink' (cult. at the Monrovia Nurs., Azusa, Calif.) = 'Charming'.

Flowers salmon-pink with a red suffusion, single; fruits large, orange shaped, umbilicate. Selection of K. Wada, Hakoneya Nurseries, before 1939. Shinonome means girl of Shino, a town usually spelled Shinjō, in Japan.


'Shirabotan' (Taranto Gard., Pallanza, It., List of Seeds 1956–57) = 'SHIRABOTAN'.


'Sunrise' (Gauntlet Nurs., Chiddingfold, Engl., Cat. 1930) = 'KNAP HILL SCARLET'.


'SUPERBA' (C. maulei var. superba Frahm, Gartenw. 2: 214. 1898). Flowers scarlet-red, single or slightly semidouble; fruits apple shaped, deeply umbilicate. Origin unknown, probably a German cultivar, before 1898.

'TEXAS SCARLET' (C. × superba Texas Scarlet, Clarke Nurs., San Jose, Calif., Wholesale Price List May 1, 1951). Branches spreading, almost spineless; flowers large, watermelon-red, flat open, single; fruits apple shaped, calyx persisting. Selection of W. B. Clarke, probably no. DC-125, introduced and named by Thomas Bell Foster Nurseries, Houston, Texas, before 1951. The name is registered.

'Thornless Pink' (Stribbling Nurs., Merced, Calif., Wholesale Price List 1958, without description) = 'PINK LADY'.


'ULIDIA' (C. maulei Ulidia, Donard Nurs., Newcastle, N. Ireland, “Good Gard. Pl.” 1960–61). Flowers large, crimson-red, single; fruits ovoid, strongly ribbed. Selection of Sliève Donard Nursery about 1945, introduced about 1955. This is a seedling of 'ROWALLANE' and according to Dr. S. G. A. Doorenbos, The Hague, Netherlands, is identical with his 'NICOLINE'.

'Verboom's Vermilion' (Krüssmann, Deutsche Baumsch. 5(7): 188. 1953) = 'ETNA'.

[ 63 ]
‘VERMILION’ (Barbier Nurs., Orléans, Fr., Cat. 1913–14). Flowers orange, single; fruits apple shaped, umbilicate. Selection of Barbier Nurseries, introduced in 1913. This is the product of a cross between ‘BALTZI’ and ‘MAULEI’.


‘VESUVIUS’ (cult at the Royal Botanic Gardens, Kew, Richmond, Surrey, Engl.). Flowers large, scarlet-red, single; fruits apple shaped, narrowly umbilicate. Selection of K. Verboom, Boskoop, introduced in 1953. This is a seedling of ‘SIMONII’ pollinated by an unknown C. × superba. The leaves of this backcross look more like those of C. speciosa.


‘White Fruit’ (cult. at the Morton Arb., Lisle, Ill.; plant now dead) = ‘FRUCTICO ALBA’.


Chaenomeles × vilmoriniana (new hybrid group).

(C. cathayensis × speciosa). VILMORINIANA group.

Shrubs about 7–8 feet high. Branches stiff, erect as in C. cathayensis, but more numerous, armed with spurs or strong spines. Young shoots glabrous or sparsely pubescent; those of the second year completely smooth. Leaves elliptic to ovate, when young with a light fulvous tomentum on the under surface, sharply serrate, with the serration usually terminating in an awn-like tip. Flowers large, white, suffused with pink as in C. cathayensis. Fruits few, ovoid, approximately 8 cm. long, ripening late.


Not hardy north of Zone VI. This hybrid group is named for the late Philippe de Vilmorin, Verrières-le-Buisson, France, who, in 1921, made the cross from which the first cultivar of this group was raised.
'AFTERGLOW' (Clarke Nurs., San Jose, Calif., Wholesale Price List Dec. 1, 1947). Leaves long and narrow; flowers white turning rose-pink with a touch of lavender, semidouble; fruits ovoid, slightly ribbed, calyx accrescent. Selection of W. B. Clarke, probably no. E.90–2, introduced in 1947. Clarke says that "it is a seedling of 'Mount Everest' which it resembles in most ways except that it has double flowers." Plant Patent no. 847 taken on June 14, 1949. The name is registered.

'HYBRIDA' (C. hybrida [C. cathayensis × speciosa, as C. lagenaria cathayensis × japonica] Lemoine Nurs., Nancy, Fr., Cat. no. 202. 1928, without description) = 'VEDRARIENSIS'.

'_MOUNT EVEREST' (C. × californica Mount Everest, Clarke Nurs., San Jose, Calif., Gard. Aristocrats 7: 14. 1940). Leaves long and narrow; flowers large, white turning rose-pink with a touch of lemon and lavender, single; fruits ovoid, calyx accrescent. Selection no. 355 of W. B. Clarke, introduced in 1940. The name is registered.

'Mt. Everest' (Krüssmann, Deutsche Baumsch. 4(4): 88. 1952) = 'MOUNT EVEREST'.


CULTIVARS OF UNDETERMINED SPECIES OR HYBRID GROUP


'ARGENTEA' (C. japonica argentea Buyssens Nurs., Uccle, Belg., Cat. 1933, without description). Origin unknown, before 1933.


'CLAYDEN' (Anonymous, Jour. Roy. Hort. Soc. 72: lxx. 1947, without descrip-


‘Dwarf Orange Red’ (W. Allan Nurs., Summerville, S. C., Cat. 1960, without description). Flowers “orange-red,” single. This may not be a clone, but selected seedlings only. Since Walter Allan is now dead, and his nursery sold, the origin of his selections will remain unknown.


‘Lewalliensis’ (cult. at the Nat. Arb., Washington, D. C.). Flower color and origin unknown, before 1960. This name was probably derived from a confusion with Chaenomeles japonica var. maulei Lawallée, Arb. Segrez. 110. 1877.


'SALMONEA' (Bruno, Rev. Hort. 1890: 212. 1890, without description; Hodgins Nurs., Essendon, Australia, Cat. without date, probably 1925, with description). Flowers clear salmon to rose-pink, single. Origin unknown, before 1890.

'Salmon Queen' (Sunningdale Nurs., Windlesham, Engl., Cat. 1961) = 'Rosy Red'.

'Shasta' (Plant Patent no. 701, taken by Toichi Domoto, nurseryman, Hayward, Calif., June 25, 1946), name changed to 'Purity'.


'SINGLE WHITE' (W. Allan Nurs., Summerville, S. C., Cat. 1953–54, without description). Flowers white, single. See 'DWARF ORANGE RED'.


'TALL LARGE FLOWERING SALMON' (W. Allan Nurs., Summerville, S. C., Cat. 1960, without description). Flowers salmon, single. See 'DWARF ORANGE RED'.


'Tsukasi' (cult. at the Univ. of Minnesota, St. Paul, Minn.) = 'TSUKASA-BOTAN'.


'ZABELII' (Univ. V. Babes, Din Cluj, Romania, Seed List 1960, without description). Flower color and origin unknown, before 1960. Named for Hermann Zabel, Superintendent of the Forest Academy of Munich, Germany.


III. CULTIVARS LISTED ACCORDING TO COLOR CLASS

To guide the horticulturist or the amateur gardener who may find the list of over 550 names formidable, this third list is added. This is an attempt to classify the living cultivars by color according to the Nickerson color fan distributed by the American Horticultural Council. It was possible to compare drawings of flowers of a single shrub with other drawings made at different dates. The conclusion from these studies is that the colors may change in intensity from year to year, or season to season. In this list the predominating color, or the range of color, is given. Within each of the five color classes the cultivars are further classified by color characteristics and then arranged according to their predominant single, semidouble, or double flower character which also may vary somewhat according to the season. A double dagger ($) preceding the name indicates that the plant has been found outstanding in regard to flowers and vegetative characters, and may be recommended for cultivation. This evaluation was based on observations made in arboreta in the eastern and midwestern United States and in several European botanical gardens. It should be noted

Since the Arnold Arboretum is gathering as complete as possible a living collection of Chaenomeles, it will be possible in the future to rate accurately many cultivars which are now being "tested."
that cultivars and hybrids of *Chaenomeles cathayensis* are not hardy north of Zone VI.

**Class I. White**

**Flowers pure white, single.**

'Angustifolia'  
† 'Candida'  
'Eburnea'  
'Euphrosyne'  
'Hakugyoku'  
'Jet Trail'  
'Nivalis'  
'Nivea'  
'Shirabotan'

**Flowers pure white, semidouble.**

'Koshi-no-Yuki'  
'Purity'

**Flowers creamy white or yellowish, single.**

'Alba'  
'Mallarot'  
'Sulphurea Perfecta'  
'Zöge'

**Flowers creamy white or yellowish, semidouble.**

'Zansetsu'

**Flowers creamy white or yellowish, double.**

'Kimpo'

**Class II. White-and-Pink**

The proportion of white and pink varies in individual flowers depending on the amount of light and heat they receive at anthesis, and on their maturity. Occasional flowers of the cultivars listed below are pure white or completely pink.

**Flowers white-and-pink without yellow, single.**

'Alba Cincta', white, bordered deep pink 10RP 6/12.  
'Alba Floribunda', white and deep pink 2.5R 6/11.  
'Alba Rosea', white, outer side rose-pink.  
'Carnea', white, outer side pale pink.  
'Contorta', white, outer side pale pink.  
'Fructico Alba', white tinted with strong pink 2.5R 7/8.  
'Fructico Alba', white tinted with moderate pink 2.5R 8/5.  
† 'Jimmy's Choice', white and moderate yellowish pink 7.5R 8/6 to strong purplish red 7.5RP 5/12.  
'Kan-Toyo-Nishiki', white and moderate pink 2.5R 8/5 to strong purplish pink 7.5RP 7/10.
‘Mallardii’, deep pink in the center with white edges.
‡ ‘Marmorata’, white and strong pink 2.5R 7/8.
‡ ‘Moerloosei’, white and deep pink 2.5R 6/11.
‡ ‘Mount Shasta’, white and pale pink 2.5R 9/3, tinted with lavender.
‘Nivea Extus Coccinea’, white, outer side pink.
‡ ‘Toyo-Nishiki’, white and moderate pink 2.5R 8/5 to strong purplish pink 7.5RP 7/10.
‘Vedrariensis’, white tinted with pink.
‘Versicolor’, white and moderate pink 2.5R 8/5 to deep purplish pink 7.5RP 6/12.

**FLOWERS WHITE-AND-PINK WITHOUT YELLOW, SEMIDouble.**
‘Afterglow’, white tinted with pink, turning soft rose.
‘Alba Grandiflora Plena’, white and pale pink 2.5R 9/3.
‡ ‘Alba Semiplena’, white to deep pink 2.5R 6/11.

**FLOWERS WHITE-AND-PINK WITH A LEMON TOUCH, SINGLE.**
‘Apple Blossom’, white and deep pink 2.5R 6/11.
‘Candicans’, “pinkish tinged creamy yellow.”
‘Candissima’, white and pale pink 2.5R 9/3.
‘Della Robbia’, creamy white turning pink.
‘Dorothy Rowe’, white and moderate pink 10RP 8/5.
‘Grandiflora’, white to strong pink 2.5R 7/8.
‘Grandiflora Rosea’, “creamy yellow to soft pink.”
‘Lutea Viridis’, white and greenish yellow turning moderate pink 2.5R 8/5.
‡ ‘Mount Everest’, white tinted with pale pink 2.5R 9/3, lemon and lavender.
‘Papeleui’, creamy white and pink.
‘Perfecta’, creamy white to deep pink 10RP 6/12.
‘Rosea Grandiflora’, white to moderate pink 2.5R 8/5.
‘Spring Fashion’, white turning deep pink 10RP 6/12.

**FLOWERS WHITE-AND-PINK WITH A LEMON TOUCH, SEMIDouble.**
‘Porcelain Rose’, white and moderate pink 10RP 8/5 to deep pink 10RP 6/12.

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**Class III. Pink**

**FLOWERS PINK TO ROSE, SINGLE.**
‘Akebono’, “pale pink with stripes of a deeper color.”
‘Bonfire’, strong pink 2.5R 7/8 to strong red 2.5R 5/12.
‘California’, deep pink 2.5R 6/11.
‘Carmine Queen’, “carmine.”
‘Columbia’, moderate pink 2.5R 8/5 to deep pink 2.5R 6/11.
‘Cynthia’, moderate pink 5R 8/6 and deep pink 2.5R 6/11.
‘Dawn’, “soft pink and carmine-rose.”
‘Deep Pink’, deep pink 2.5R 6/11.
‘Early Apple Blossom’, strong pink 2.5R 7/8.
‡ ‘Echo’, moderate pink 5R 8/6 and deep pink 2.5R 6/11.
‡ ‘Enchantress’, strong pink 2.5R 7/8 to deep pink 2.5R 6/11.
‘Flamingo’, deep pink 10RP 6/12 to strong purplish red 10RP 5/12.
‘Fruitlandi’, moderate pink 5R 8/6 and deep pink 2.5R 6/11.
‘Gaujardii’, strong pink 2.5R 7/8.
‘Japanese Scarlet’, strong pink 2.5R 7/8 and strong red 2.5R 5/12.
‘Masterpiece’, deep pink 2.5R 6/11.
‘Minerva’, strong pink 2.5R 7/8.
‘Pacific Red’, pink to red.
‡ ‘Pink Beauty’, deep pink 2.5R 6/11.
‘Pink Lady’, strong purplish pink 7.5RP 7/10 to strong red 2.5R 5/12.
‘Pink Perfection’, “clear pink.”
‡ ‘Rosemary’, deep pink 2.5R 7/8.
‡ ‘Rosy Morn’, moderate pink 2.5R 8/5.
‘Sunset Glow’, moderate pink 5R 8/6 and strong purplish red 10RP 5/12.
‘Upright Pink’, “pink.”
‘Woking Star’, “pink.”

FLOWERS PINK TO ROSE, SEMIDouble.

‘Falconnet Charlet’, moderate pink 5R 8/6 and strong purplish pink 7.5RP 7/10.
‡ ‘Phylis Moore’, deep pink 2.5R 6/11.
‘Rosea Semiplena’, “bright pink.”

FLOWERS SALMON- TO CORAL-Pink, SINGLE.

‘Aurora’, “rose suffused with yellow.”
‘Azalea’, moderate yellowish pink 7.5R 8/6 to vivid red 5R 5/13.
‘Boule de Feu’, deep yellowish pink 5R 6/11.
‘Bunyardii’, “salmon-pink.”
‡ ‘Charming’, deep yellowish pink 5F 6/11.
‡ ‘Colette’, strong yellowish pink 7.5R 7/9 and deep pink 2.5R 6/11.
‘Coral Beauty’, strong yellowish pink 7.5R 7/9.
‘Coral Sea’, strong yellowish pink 10R 7/9 and deep yellowish pink 5R 6/11.
‘Doctor Bang’s Pink’, “salmon pink.”
‘Foliis Rubriss’, deep yellowish pink 5R 6/11.
‘Harlequin’, deep yellowish pink 5R 6/11 and rose-pink.
‘Juliet’, moderate yellowish pink 7.5R 8/6.
† ‘Margaret Adams’, deep yellowish pink 5R 6/11.
‘Maulei’, strong yellowish pink 7.5R 7/9 to strong reddish orange 7.5R 5/13.
‘Naranja’, strong yellowish pink 10R 7/9 and strong purplish pink 7.5RP 5/12.
‘Nasturtium’, strong yellowish pink 10R 7/9 to strong reddish orange 10R 6/12.
‘Salmonsea’, “clear salmon to rose-pink.”
‘Sargenti’, strong yellowish pink 7.5R 7/9 to strong reddish orange 7.5R 5/13.
‘Shinonome’, light yellowish pink 7.5R 9/3 suffused with deep pink 2.5R 6/11.
‘Tall Large Flowering Salmon’, “salmon.”
‘Tattagawa’, “deep brownish pink shaded yellow at the base.”
‘Versicolor Lutescens’, moderate yellowish pink 7.5R 8/6 and strong yellowish pink 7.5R 7/9.

FLOWERS SALMON- TO CORAL-PINK, SEMIDouble.
† ‘High Noon’, strong yellowish pink 5R 7/9 and strong red 2.5R 5/12.
† ‘Kermesina Semiplena’, strong yellowish pink 5R 7/9 to vivid red 5R 5/13.
‘Rosea Plena’, deep yellowish pink 5R 6/11.

FLOWERS SALMON- TO CORAL-PINK, DOUBLE.
† ‘Cameo’, strong yellowish pink 7.5R 7/9.
“Tsukasa-Botan”, “yellowish salmon.”

CLASS IV. Orange

FLOWERS TRUE ORANGE, SINGLE.
‘Aurea’, strong reddish orange 7.5R 6/12.
† ‘Coquelicot’, strong reddish orange 7.5R 6/12 suffused with deep purplish pink 7.5RP 6/12.
† ‘Corallina’, strong reddish orange 7.5R 6/12.
‘Dwarf Coral’, “orange.”
‘Dwarf Poppy Red’, strong reddish orange 7.5R 6/12.
‘Mandarin’, strong reddish orange 7.5R 6/12.
‘Orange Beauty’, “orange.”
‘Port Eliot’, “tangerine-orange.”
‘Taiojishi’, strong orange 2.5YR 7/10.
‘Vermilion’, strong reddish orange 7.5R 6/12.

FLOWERS ORANGE, SEMIDouble.
‘Abricot’, “reddish orange.”
‘Early Orange’, “orange with a suggestion of coral.”
‘Yaegaki’, light orange 5YR 8/7.

[ 72 ]
FLOWERS SCARLET-RED, SINGLE.

‘Andenken an Karl Ramcke’, “light cinnabar.”
‘Choshun’, “terra cotta.”
‘Dixie Scarlet’, “scarlet.”
‘Dwarf Orange Red’, “orange-red.”
‘Dwarf Scarlet’, “scarlet.”
‘Escarlate’, “scarlet.”

‡ ‘Elly Mossel’, strong reddish orange 7.5R 5/13 to dark reddish orange 7.5R 4/11.
‘Fascination’, “deep scarlet-red.”
‘George Landis’, “sallow orange-red.”
‘Grandiflora Perfecta’, “cinnabar red.”
‘Hibotan’, “bright scarlet.”
‡ ‘Hi-no-Tsukasa’, strong reddish orange 7.5R 5/13 to strong red 5R 4/12.
‘Indian Chief’, “scarlet.”
‘Kogyoku’, “vermilion.”
‡ ‘Knap Hill Scarlet’, strong reddish orange 7.5R 5/13.
‘Momijiyama’, “orange-scarlet.”
‡ ‘Pigmani’, strong reddish orange 7.5R 5/13.
‘Rakyuo’, “vermilion orange.”
‘Russell’s Red’, “bright scarlet.”
‘Salmon’, “salmon-red.”
‘Sämmlinge von Andenken an Karl Ramcke’, “cinnabar.”
‘Tatsugashira’, “orange-red.”
‘Winter Cheer’, “orange-scarlet.”
‘Yuyo’, “pale terra cotta with cinnabar suffusion.”

FLOWERS SCARLET-RED, SEMIDOUBLE.

‘Double Vermilion’, “vermilion.”
‘Fireball’, “flame-red.”
‘Nishikichidon’, strong reddish orange 7.5R 5/13.
‘Orange’, “light red-orange.”
‘Sunset’, strong reddish orange 7.5R 5/13.

[ 73 ]
'Taioh-Nishiki', vivid red 5R 5/13 and dark reddish orange 7.5R 4/11.
'Wakaba', "pale terra cotta."

FLOWERS SCARLET-RED, DOUBLE.
'Kininshi', "deep terra cotta."
'Koshi-no-Homare', "bright vermilion-red."
'Ormond Scarlet', "scarlet."

FLOWERS CRIMSON-RED, SINGLE.
'Alarm', "deep red."
‡ 'Arthur Colby', strong purplish red 10RP 5/12.
'Atroccicina', vivid red 5R 5/13.
'Atrosanguinea', "blood-red."
'Baltzii', strong red 2.5R 5/12.
'Benibotan', "bright red."
'Benichidori', strong red 2.5R 5/12.
'Brilliant', strong red 5R 4/12.
'Cardinal', strong red 2.5R 5/12 to moderate red 2.5R 4/10.
'Cardinalis', vivid red 5R 5/13.
'Clarke's Giant Red', strong red 2.5R 5/12.
'Coccinea', "bright red."
‡ 'Crimson and Gold', strong red 5R 4/12 to dark red 5R 3/7.
'Cardinal Beauty', strong red 2.5R 5/12.
'Deep Red', "deep red."
'Ernst Finken', "fiery red."
'Eximia', strong red 2.5R 5/12.
‡ 'Fire', moderate red 2.5R 4/10.
'Fire Dance', vivid red 5R 5/13.
'Hanazono', strong red 5R 4/12.
‡ 'Hollandia', strong red 5R 4/12.
'Jane Taudevin', "bright red."
'Knap Hill Radiance', vivid red 5R 5/13.
‡ 'Leichtlinii', vivid red 5R 5/13.
‡ 'Leonard's Velvety', strong red 5R 4/12.
'Macrocarpa', strong red 2.5R 5/12.
'Natorp's Hybrid', "light red."
'Nicoline', "crimson."
'Red Ruffles', moderate red 2.5R 4/10.
'Red Sprite', strong red 2.5R 5/12.
'Riccartonii', “deep red.”
'Rosy Red', “rosy-red.”
‡ 'Rowallane', vivid red 5R 5/13.
'Rubra', moderate red 2.5R 4/10.
'Rubra Grandiflora', strong red 5R 4/12.
'Ruby Glow', moderate red 2.5R 4/10.
'Sanguinea', “crimson.”
'San Jose', “deep rose.”
'Spitfire', strong red 2.5R 5/12.
'Superba', strong red 5R 4/12.
'Tani-no-Yuki', “bright red with a white base.”
‡ 'Texas Scarlet', vivid red 5R 5/13.
'Ulidia', vivid red 5R 5/13 to strong red 5R 4/12.
‡ 'Umbilicata', strong purplish red 10RP 5/12.
‡ 'Vesuvius', strong red 2.5R 5/12.
'Winter Flowering', “bright red.”

FLOWERS CRIMSON-RED, SEMIDouble.
‘Atrosanguinea Plena’, “bright red.”
‘Double Red’, strong red 2.5R 5/12.
‘Kokko’, “bright dark red.”
‘Rubra Plena’, “red.”
‘Sanguinea Plena’, “rosy-red.”
‡ ‘Simonii’, strong red 5R 4/12 to dark red 5R 3/7.

FLOWERS CRIMSON-RED, DOUBLE.
‘Ormond Crimson’, “deep red.”
‡ ‘Red Chief’, strong red 5R 4/12.
‘Shokko’, “fiery crimson.”
‘Temmei’, “intense crimson.”