

## A new cultivar of red oak

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During the 1990s a plant was distributed under the name *Quercus x fernaldii* and was acquired by several collections in Britain and continental Europe. It was also listed under the name *Quercus ilicifolia rubra* or *Q. ilicifolia x rubra*.

*Quercus x fernaldii* Trel. is a hybrid between *Q. ilicifolia* (Bear oak) and *Q. rubra* (Red oak), both natives of eastern North America. It was described by Trelease (1924) from a specimen collected at Bedford, Massachusetts, by American botanist Merritt Lyndon Fernald (1873-1950), a director of the Gray Herbarium of Harvard University and editor of the 8th edition of *Gray's Manual of Botany*. According to Trelease, Fernald considered the specimen to represent a hybrid between *Q. ilicifolia* and *Q. velutina* but Trelease listed it as *Q. ilicifolia x Q. maxima*, while Palmer (1948) considered it to be *Q. borealis x Q. ilicifolia*. Both *Q. borealis* and *Q. maxima* are now regarded as synonyms of *Q. rubra* (Govaerts & Frodin, 1998). It is now recorded from Alabama, Virginia, Pennsylvania and Maine, as well as Massachusetts (United States Department of Agriculture, Natural Resources Conservation Service, Plants Database, <http://plants.usda.gov/>). The Alabama record is perhaps erroneous as *Q. ilicifolia* is unlikely to occur there.

Grafted plants under the name *Quercus x fernaldii* were first received at the Sir Harold Hillier Gardens in 1993 from M.M. Bömer, Zundert, Netherlands. The source of the original material is not clear. When plants first came into cultivation they showed a very distinct leaf shape, almost unlobed with long bristle-tipped teeth. Observations on the plants over following years at both the Sir Harold Hillier Gardens and other collections such as that at Chevithorne Barton, Devon, showed that the leaf shape changed on these plants to something more closely resembling that of *Q. rubra*. The trees at the Sir Harold Hillier Gardens have reached about 7 m tall and only occasionally show the unlobed leaves seen in young plants.

The Bear oak (*Q. ilicifolia*) is a very distinct species, generally easy to recognise amongst the red oaks in its shrubby habit, relatively small leaves with few lobes and a persistent grey-white tomentum beneath. These characters were obvious in a plant I found at Rosemoor in Devon several years ago under the name *Q. marilandica* and apparently representing *Q. x brittonii*, a hybrid between the two species (Coombes 2004).

The plants seen in several gardens as *Q. x fernaldii*, however, showed no influence of *Q. ilicifolia*. The red shoots, red buds and leaves almost glabrous and glaucous beneath showed that they belong to *Q. rubra*. With the great variation in leaf shape it was difficult to make a judgement on these plants and at one time I considered it to be not worth distinguishing (Coombes 2004). However, although plants in cultivation dating from the first introductions, have lost their original, sparsely lobed leaf shape, they remain distinct in their rather deeply lobed leaves with long bristle-tipped teeth and a distinct reticulate

venation and I consider the best way to treat them is as a cultivar of *Q. rubra*. Interestingly, this is not the first time that the hybrid has been confused with *Quercus rubra*. According to Palmer (1948), *Q. x lowellii*, a name suggested by Charles Sargent for what was thought to be a hybrid between *Q. ilicifolia* and *Q. rubra*, was considered by Trelease to be an aberrant form of *Q. rubra*.

### *Quercus rubra* L. 'Cyrille' new cultivar

A vigorous deciduous tree, ultimate height uncertain, probably of medium to large size. Bark grey, smooth; shoots glabrous, glaucous-bloomed when young, flushed red on the exposed side; buds red-brown, with some white or pale brown hairs on the scales. Leaves elliptic with 3-4 lobes on each side extending about 2/3 of the way to the midrib and ending in long, bristle-tipped, often falcate teeth, lamina to 19 x 14 cm, bright green above with distinct reticulate venation, glaucous beneath turning brown to yellow-brown in autumn, base broadly cuneate to rounded; petiole to 6 cm, red on the exposed side. Flowers and fruit unknown.

Derivation: Named after the grandson of Jo and Maarten Bömer.

**Standard specimen:** Harold Hillier Herbarium, specimen no. 2442, A.J. Coombes 980631, 21 June 1998, from a plant cultivated at the Sir Harold Hillier Gardens, accession number 1993.0056 B.

The description has been made from a semi-mature plant. Young plants may have almost unlobed, often puckered and distorted leaves that may also be seen occasionally on older plants. It has long been my opinion that the leaf shape is caused by a virus, the effects of which decrease with the age of the plant. See photograph of mature leaf on page 41.

#### REFERENCES

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