

Vitis × *alexanderi* Prince ex Jacques (Vitaceae), the first 'American Hybrid' grapes

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Abstract

Mabberley, D.J. (National Herbarium of the Netherlands, University of Leiden, The Netherlands, and Royal Botanic Gardens Sydney, NSW 2000, Australia) 1999. *Vitis* × *alexanderi* Prince ex Jacques (Vitaceae), the first 'American Hybrid' grapes. *Telopea* 8(3): 377–379. The first 'American Hybrid' grapes (*Vitis vinifera* L. × *V. labrusca* L.) are to be referred to as cultivars of *Vitis* × *alexanderi*, a name first validly published in a French periodical in 1829. Attention is drawn to unlisted names (in *Boronia*, *Embothrium*, *Mimosa* and *Petrophile*) of native Australian plants also validly published in the same series.

Introduction

Most grape cultivars grown in Australia are selections from hermaphrodite forms of the Old World grapevine, *Vitis vinifera* L., and these include all those grown for wine here. However, a few others, such as 'Concord' and 'Catawba', are known to be crosses between *V. vinifera* and the North American skunk grape, *V. labrusca* L. (see Scherz & Zimmermann 1953). Elsewhere in the Pacific, notably in Hawai'i, another such hybrid important as a commercial crop is 'Isabella' (Mabberley 1998: 94, t. 37). 'Concord' is the most important cultivar in parts of the north-eastern United States and is the basis of the grape-juice industry there (Pinney 1994).

The early crosses arose spontaneously in areas of the eastern United States where the exotic *V. vinifera* was grown near *V. labrusca* populations. One of the first to be recorded was 'Alexander', which was found before 1776 in Pennsylvania, not far from where the state's founder, William Penn (1644–1718), had planted *V. vinifera* in 1683 (Pinney 1994). As *V. vinifera* failed over and over again in the United States because of phylloxera and other diseases, such hybrids, with resistance from *V. labrusca*, were selected, despite the 'foxy' flavour of the berries. 'Alexander', known by 1804 as 'Alexander's or Tasker's grape' (Mabberley 1998: 143), was the basis, in Indiana in 1806, of the first North American wine industry, so esteemed locally that Thomas Jefferson could declare it 'worthy of the best Vineyards of France' (Hedrick 1908: 160–1, but see below).

In his annual nursery catalogues of the 1820s, William Prince (1766–1842) of the Linnaean Botanic Garden, Flushing, New York, was offering plants of both 'Isabella' and 'Alexander' at 37½¢ each. These and similar cultivars were the first 'American Hybrid' grapes, a group now taken to include other crosses involving North American species. Many of those have no *V. labrusca* in them but are important as phylloxera-resistant rootstocks. The early hybrids were imported to Europe and others were deliberately synthesized there ('French Hybrids') in the battle to re-establish French wine-growing in the face of the phylloxera outbreak of 1867. Although 'Alexander' has slipped out of commercial cultivation and was perhaps hardly, if ever, grown in Australia, 'Isabella' is still grown here (Kerridge & Antcliff 1999: 198), though the foxy or blackcurrant taste of the grapes inherited from *V. labrusca* has meant that, lest the *vendange* be contaminated, it has been illegal since 1934 to plant 'Isabella' and other *vinifera*–*labrusca* crosses in France for example (Pinney 1994).

Because of the disease resistance and disagreeable flavour (to most palates) coming from *V. labrusca*, it is useful to be able to distinguish formally between the cultivars derived from just *V. vinifera*, and those of the original hybrid parentage. In recent bibliographical research to ascertain the earliest name for these *V. vinifera*-*V. labrusca* crosses (Mabberley 1998: 143), the importance of the publications of the French growers, who introduced the hybrids to Europe in the first decades of the nineteenth century, was emphasized. 'Isabella' for example, was offered (as '*V. isabellae*', Prince's nursery name of 1822) by Audibert of Tonelle, near Tarascon, in southern France at least as early as 1830 (see Mabberley 1998: 143) and (as 'Isabelle'), by Jacquemet-Bonnefont of Lyon by 1833 (Catalogue et prix-courants: 11, 1833). By examining the French horticultural literature of the 1820s, it has now become possible to pinpoint the earliest botanical name for the first 'American Hybrids' as follows:

Vitis* × *alexanderi Prince ex Jacques, *J. Soc. Agron. Prat.* 1829: 409 (Dec 1829), pro sp.

[*Vitis* × *alexanderi* Prince, *Cat. Trees Plants*, ed. 21: 27 (1822), pro sp., nom. nud.]

Vitis × *isabellae* Jacques [pro sp.] var. *alexanderi* (Jacques) Jacques, *Ann. Fl. Pomone* 1834: 302, cum tab. (1834), nom. illeg. ('Isabella' was the basis for the autonymic variety).

Type: France, Neuilly (cultivated; introduced from Prince's Linnaean Botanic Garden, Flushing, New York in 1825), fl. June 1829 & fr. 1829, *H. Jacques s.n.* (FI ?, n.v.; apparently not preserved, in which case Jacques's 1834 plate based on that very plant would be a good candidate for a neotype [iconotype]: '*Vitis Isabellae Alexanderi*', Jacques, l.c.). This plate is a clear link to Jacques's taxon and in this unusual case an illustration would seem preferable to a modern herbarium specimen, particularly as 'Alexander' seems not to be in general cultivation today. Indeed the grape seems not to be grown at all in Australia or Europe, though material referred to the old cultivar is represented in the grape germplasm collection of the USDA-ARS Plant Genetic Resources Unit of Cornell University, USA (Warren F. Lamboy in litt.).

Vitis × *prolifera* Raf., *Medic. Fl.* 2: 134, t. 100, f. F (1830), pro sp.; Mabb., *Paradisus*: 94, t. 37, & 143 (1998), q.v. for discussion of type and further synonymy, **syn. nov.**

Henri-Antoine Jacques (1782–1866) got his plant from Louis Noisette (1772–1849), who had imported it directly from William Prince at Flushing, New York, in 1825. Jacques gives a full description of the plant he had at first kept in a pot but which flowered and fruited when planted outside at Neuilly in 1829: besides morphological features he includes not only an account of its characteristically 'foxy' berries but also that of its hermaphrodite flowers like those of cultivated forms of *V. vinifera*. Although Jacques calls it 'Vigne d'Alexandrie [i.e. Alexandria]', and Prince had it as 'Alexandrian' before him, Jacques corrected that in 1834 to 'Vigne d'Alexander' as it commemorates John Alexander, gardener to Governor John Penn (1729–1795), William Penn's grandson, following Prince's catalogues 'Alexander's or Schuylkill muscadel ...' (1823: 31, 1825: 34 [National Agricultural Library, US Department of Agriculture, Beltsville, teste Cheryl Toefield in litt.], 1826: 32), but included it under *V. isabellae*, a name (unlike *V. alexanderi*) not validly published before that. John Alexander had found it in the hills near the Schuylkill River, hence the other early vernacular name (Hedrick 1908: 160–1).

Conclusion

Cultivars derived from the Old World grapevine alone are therefore to be written *Vitis vinifera* 'Cabernet Sauvignon' or *V. vinifera* 'Purpurea', for example ; those with the hybrid parentage as, for example, *Vitis* × *alexanderi* 'Isabella' or *V.* × *alexanderi* 'Concord'.

Postscript

The volume where *Vitis* × *alexanderi* was first published was the successor to the short-lived *Journal des Jardins* (1828), copies of both of which are held in the Bibliothèque Centrale of the Muséum National d'Histoire Naturelle, Paris, for example, but they are rather little known as yet in Australia (cf. Mabberley 1999); new validly published binomials in both, referring to Australian native plants being grown in Europe in the 1820s, though not yet in APNI (nor *Index Kewensis* where *V.* × *alexanderi* is not found either), are:

Boronia caerulea Boitard, *J. Jard.*: 154 (1828, Rutaceae)

Embothrium acanthifolium Hort. Angl. ex Cels, *J. Soc. Agron. Prat.* 1829: 345 (1829) = ? *Grevillea acanthifolia* A. Cunn. (Proteaceae)

Mimosa lunata Noisette, *J. Jard.*: 118 (1828) = ? *Acacia lunata* Lodd. (Leguminosae)

M. prostrata Noisette, l.c., non Lam. (i.e. *Neptunia prostrata* (Lam.) Baill.) = ? *Acacia prostrata* Lodd., i.e. *A. genistifolia* Link

M. semperflorens Noisette, l.c. = ? *Acacia semperflorens* Jacques

Petrophile triloba Cels, *J. Jard.*: 186 (1828) as '*Petrophylla*' = ? *Isopogon trilobus* R.Br. (Proteaceae).

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