Table 1. Characteristics of 'Blanc Du Bois' compared with three other PD-resistant bunch grapes used for white wine.

Cultivar	Yield (t·ha⁻¹)²	Bunch wt (g)	Berry wt (g)	Date ripe	Sol. solids (%) <sup>z</sup>	Titratable acidity (g/100 ml) <sup>z</sup>	pH²
Blanc Du Bois	11.9 a	133	2.9	3 July	17.4 b	.92 b	3.3 a
Lake Emerald	11.4 a	184	1.8	30 July	20.1 a	1.26 a	3.3 a
Stover (grafted)	10.3 a	117	2.3	10 July	16.1 b	.85 b	3.2 a
Suwannee	11.2 a	113	3.0	7 July	17.0 b	.89 b	3.4 a

<sup>&</sup>lt;sup>z</sup>Three-year mean differences according to Duncan's multiple range test, P = 5%.

Wine Society, (with 9-11 average, 12-14 good, 15-17 very good, and 18-20 excellent), 'Stover' wine rated 15.2, 'Suwannee' 15.7, and 'Blanc Du Bois' 15.9. 'Blanc Du Bois' wine received a bronze medal in the 1986 Eastern International Wine Competition and a gold medal at the 1986 North Florida Fair Wine Competition. Whereas many bunch grape cultivars grown in Florida lose

character during the warm nights and hot days of ripening on the vines, 'Blanc Du Bois' maintains its fruity quality and delicate sugar : acid balance through fermentation and into the bottle.

'Blanc Du Bois' is recommended for trial as a premium white wine cultivar for the Southern U.S. Level of winter hardiness is not known, because trials to date have been limited to southern Texas, Louisiana, Mississippi, and Florida. Regular sprays with fungicides and vineyard sanitation procedures, such as weed control and removal of all fruit from the vines, are recommended for commercial production of this cultivar. The trellis system should promote maximum air flow and light penetration around the fruit to reduce the incidence of disease.

# Availability

Inquiries regarding the availability of 'Blanc Du Bois' should be directed to Florida Foundation Seed Producers, Inc., P.O. Box 309, Greenwood, FL 32443.

#### Literature Cited

 Burgess, J. 1986. Florida wine varieties: Now and in the future, p. 93-97. In: M.C. Halbrooks (ed.). Proc. First Greater Grapes Symp. Univ. of Florida, Gainesville.

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# 'Conoy' Viburnum

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Additional index words. shrub breeding, plant introduction, Viburnum × burkwoodii, Viburnum utile

Abstract. Viburnum × burkwoodii Burk. & Skip. 'Conoy' is a backcross allied to such significant hybrid viburnums as V. × burkwoodii Burk. & Skip. (2), V. × burkwoodii Burk. & Skip. 'Park Farm Hybrid' (Burk.) (1), V. × burkwoodii Burk. & Skip. 'Mohawk' (Egolf) (3), V. × carlcephalum Burk, (12), V. × carlcephalum Burk. 'Cayuga' (Egolf) (3), and V. × 'Chesapeake' (Egolf) (7). These viburnums of Asiatic origin are cultivated extensively for their dense growth habit, deciduous to semi-evergreen leaves, and pink to white fragrant flowers. 'Conoy' is distinct from these cultivars with compact growth habit, fine-textured evergreen foliage, and persistent, abundant, glossy, red fruit. 'Conoy' is the 18th Viburnum cultivar introduction from the U.S. National Arboretum shrub breeding project (4–10).

57259, PI 499834, is a spreading, densebranched, evergreen shrub that in 17 years has grown 1.5 m high and 2.4 m wide (Fig. 1). The naked, densely stellate, grey tan (Greyed Green 197B and 197C) (13) buds are borne on densely stellate, pale green (Yellow Green 148C) to light grey (Greyed-Green 197) young branches that become grey brown (Brown 200D), with maturity glabrescent, later older branches and trunk, grey (Grey 201A) with prominent lenticels. The opposite, coriacious, glabrous, glossy, sparsely stellate leaves are dark green (Yellow Green 148C) in summer with dark maroon tinge (Greyed-Red 178A) in winter and densely stellate, pale olive green (Yellow Green 148C) beneath, 3.5 to 6.0 cm long, 1.7 to 2.2 cm wide, elliptic to lanceolate, acute at apex, obtuse at base, entire with a 6- to 10-mm petiole. Flowers are all similar, appearing with young leaves in late April at

# Origin

In 1968, V. utile Hemsl., a species from China, was crossed with V. utile 'Park Farm Hybrid' (V. carlesii Hemsl. x V. utile), a hybrid developed in England. This cross combined a winter-tender, fine-textured, evergreen species with a hardy, free-flowering, semi-evergreen cultivar. Among the progeny, which at an early age displayed a wide distribution of leaf and growth habit characteristics, one plant was selected for propagation and field trial in 1976. Subsequently, plants were distributed to cooperators for regional test and stock increase, and the selection was designated the cultivar Conoy.

# Description

Viburnum × burkwoodii 'Conoy', NA

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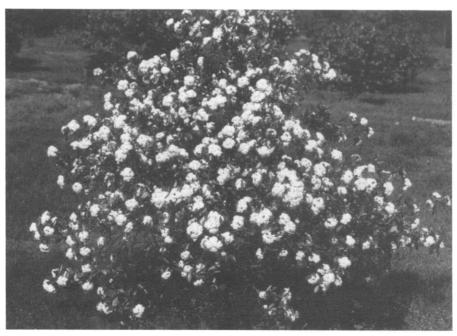


Fig. 1. 'Conoy' low spreading growth habit.



Fig. 2. Cream white florets of 'Conoy' are highlighted by the glossy, dark green new leaves.



Fig. 3. 'Conoy' fruit ripen a bright red in mid-August and turn black in October.

Washington, D.C., slightly fragrant, densely cymose, with cymes compound, umbellate, terminal, 5 to 6.5 cm in diameter, short-stalked, stellate, with 20 to 75 florets, buds dark red (Red 46A) opening cream white (Fig. 2). The glossy, ovoid, 6 to 7 mm in diameter, 8- to 11-mm-long fruit in slightly pendulous clusters 3.5 to 5.5 cm in diameter,

ripen in mid-August to a bright red (Red 46A), shading on the underside to lighter red (Red 47D) before turning black in October (Fig. 3).

'Conoy' at maturity is a compact plant nearly twice as wide as high. The small, glossy, dark green, leathery leaves create a boxwood-like texture. The lustrous foliage is highlighted with a profusion of dark red buds and cream white flowers in spring and, most outstanding, abundant, long-persistent, dark red fruit clusters  $\approx 6$  to 8 weeks. The plant has been resistant to bacterial leaf spot. 'Conoy', which is evergreen with slight bronzing in severe cold weather, has not been winter-injured in 17 years. It is hardy to USDA Zone 7b (14) and has withstood temperatures of  $-23^{\circ}$ C at Washington, D.C. In mild climates, the foliage remains a shiny, dark green and does not winter-bronze.

The cultivar name 'Conoy' has been registered with the U.S. National Arboretum, the International Registration Authority for cultivated Viburnum, in accordance with the International Code of Nomenclature of Cultivated Plants—1980 (9). Herbarium specimens are on deposit in the U.S. National Arboretum Herbarium.

### Culture

'Conoy' is adaptable for cultivation under the same climatic and soil conditions as other viburnums. It grows best in partial to full sun with an adequate moisture supply in a heavy loam with a pH of 6.0 to 6.5. Plants are most readily propagated by softwood cuttings under mist, preferably rooted in June so that the plants develop vegetative growth that will not be winter-injured. Small plants frequently will flower on the terminal shoots the first season, but is is not until the 3rd or 4th year of growth following propagation that flowering is profuse. The young plants rapidly develop a well-branched, globose habit that is amenable for container production. Because of a finely branched root system, the plant can be transplanted readily and is amenable to nursery row production.

### Outstanding characteristics and use

Whereas many viburnum species are robust plants, 'Conoy' has short, dense branching, restricted annual growth that can be maintained easily in scale in the residential landscape. This superior cultivar is suitable for use in the landscape as a specimen; a low to medium, natural or sheared hedge; for mass planting, or in containers in the home garden, parks, industrial complexes, and malls.

#### Availability

The U.S. National Arboretum releases 'Conoy' but does not have stock of this cultivar available for general distribution. The plants increased by cooperating wholesale nurseries will be the source of plants for introduction in 1988. Later plants will be distributed to cooperating arboreta, botanic gardens, and research institutions.

### Literature Cited

- Burkwood, A. 1947. The genus Viburnum.
   J. R. Hort. Soc. 72:361.
- 2. Burwood and Skipmith Ltd. 1929. Catalogue of flowering shrubs, p. 2.
- Egolf, D.R. 1966. Two new cultivars of Viburnum: 'Cayuga' and 'Mohawk'. Baileya 14:24–28.

- Egolf, D.R. 1966. Eight new Viburnum cultivars (Caprifoliaceae). Baileya 14:106-122.
- Egolf, D.R. 1971. Viburnum dilatatum 'Erie' (Caprifoliaceae). Baileya 18:23-25. Egolf, D.R. 1979. 'Shasta' Viburnum.
- HortScience 14:78–79. Egolf, D.R. 1981. 'Chesapeake' Viburnum.
- HortScience 16:350.
- Egolf, D.R. 1981. 'Eskimo' Viburnum. HortScience 16:691.
- Egolf, D.R. 1986. 'Shoshoni' Viburnum. HortScience 22:1077-1078.
- Egolf, D.R. 1986. 'Chippewa' and 'Huron' Viburnum. HortScience 22:174-176.
- International Bureau for Taxonomy and Nomenclature of International Association for
- Plant Taxonomy. 1980. International code of nomenclature for cultivated plants-1980.
- Pike, A.V. 1946. V. carlcephalum, Gard. Chon. ser. 3, 119:217.
- Royal Horticultural Society. 1966. RHS Colour Chart. London.
- USDA. 1960. Plant hardiness zone map. U.S. Dept. Agr. Misc. Publ. 814.

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# 'NuMex Sundial' and 'NuMex Suntop' **Onion**

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Additional index words. Allium cepa, vegetable breeding, bolting resistance

'NuMex Sundial' and 'NuMex Suntop' are bolting-resistant, intermediate-day onion (Allium cepa, L.) cultivars developed for fall planting in areas where seeded onions are overwintered. The cultivars were released in Sept. 1986 by the New Mexico Agricultural Experiment Station.

#### Origin

'NuMex Sundial' and 'NuMex Suntop' were derived by recurrent selection from 'Ben Shemen', an intermediate-day cultivar commonly spring-planted in the southern United States. A selection of 100 non-bolting bulbs was made from a planting with >90% bolting. Bulbs were selfed, leaving one umbel of each to intercross. Tests on selfed progeny indicated one bulb selection (7933) to be superior in bolting resistance and bulb shape. 'NuMex Sundial' and 'NuMex Suntop' were derived by two cycles of selection from the open-pollinated (intercross) progeny from 7933 (Fig. 1).

The 'Ben Shemen' parent was developed near Ben Shemen, Israel by Y. Weiss as a selection from a Yellow Sweet Spanish line obtained from Riverside, Calif. (H. Rabinowitch, personal communication). 'Ben Shemen' was reported to be earlier than the parent line and to have improved shipping and handling qualities. Maturity of Ben Shemen' is significantly earlier than for most Sweet Spanish cultivars, and nearly the same as for 'Early Harvest'. It is firm, has excellent handling qualities, and is susceptible to pink root disease, caused by Pyrenochaeta terrestris (Hansen) Gorenz, Walker and Larson. 'Ben Shemen' is a preferred cultivar in southern New Mexico because of its handling qualities, but pink root susceptibility, combined with early maturity, results in marginal yields from spring seeding.

#### **Description**

'NuMex Sundial' and 'NuMex Suntop' resemble 'Yellow Sweet Spanish' in most characteristics. Tops are large and nonglaucous. Bulbs are globe to high globe (Figs. 2 and 3) and have a smooth, tan scale. They are firmer than most Sweet Spanish cultivars, and mature 3 to 4 weeks earlier than the Utah strain of 'Yellow Sweet Spanish'.

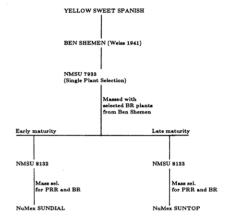


Fig. 1. Pedigree for 'NuMex Sundial' and 'NuMex Suntop'.

Bolting resistance is significantly greater than 'Ben Shemen' (Table 1), and is adequate for planting as early as 15 Oct. at Las Cruces, N.M. Fall planting contrasted to spring planting permits extensive top growth before bulbing begins and contributes to a significantly higher yield potential. The greater plant development in cool weather (late winter and spring) also contributes to improved pink root tolerance and increased yields on pink rootinfested soils. 'NuMex Sundial' and 'NuMex Suntop' are suggested for trial planting in

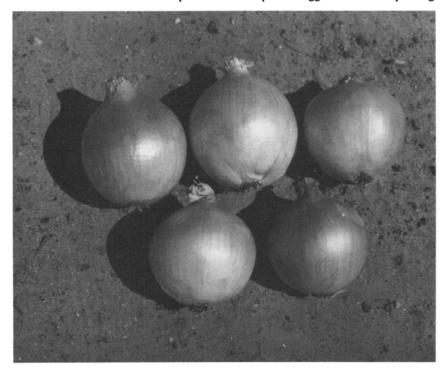


Fig. 2. 'NuMex Sundial'.

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