THE HORTICULTURAL STATUS OF THE GENUS VACCINIUM

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The Horticultural Status of the Genus Vaccinium by Welton Marks Munson

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WELTON MARKS MUNSON

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THE HORTICULTURAL STATUS

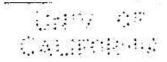
OF THE

GENUS VACCINIUM

A Thesis Presented to the University Faculty of Cornell University for the Degree of Doctor of Philosophy,

BY

WELTON MARKS MUNSON.



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行表。在2011年2月1日 1

The members of the genus Vaccinium, though indigenous to this country, and supplying in large quantities fruit which is surpassed in quality by but few of the more generally cultivated species, have received comparatively little attention from horticulturists. In 1898 a report upon the Blueberry in Maine was published by the Maine Experiment Station. The object of the present paper is to present as concisely as may be the exact status of the group at the close of the nineteenth century, and if possible to extend the knowledge of these plants in such a way as shall insure a more just appreciation of their horticultural value.

There is much confusion in the vernacular names applied to members of the genus Vaccinium. The terms "Bilberry," and "Whortleberry" usually mentioned as "common names" by American writers, are seldom or never heard among the common people in this country, while "Huckleberry" is often used indiscriminately for plants of this genus and for the Gaylussacias. In the central states the term Huckleberry is usually applied to Vaccinium corymbosum, while Blueberry is given to the low growing species like Canadense and Pennsylvanicum. In New England, Huckleberry is reserved for species of Gaylussacia, while Blueberry is applied to the lower growing species as above, and High-bush Blueberry to corymbosum. There is no satisfactory explanation of the word huckleberry, which in English works occurs only in those of recent date. The red berried species are, in general, referred to as cranberries.

¹The Latin writers of the middle ages generally referred to plants of the genus Vaccinium as MyrKika, and the fruit was known as myrHeberry. It is not improbable that the term Whortleberry is a coruntion from myrHeberry. (Cf. Prior, Pop. Names, Brit. Pits. 121) and that the American colonists further changed the name to "hurtleberry." The transition from hurtleberry to huckleberry was easy by simply dropping the first r. i. e., hulleberry. Others derive the name Whortleberry from the Anglo-Saxon haort-bery, hart berry, or as we would say, deer-berry. The question is discussed by Sturievant in the Transactions of the Massachusetts Mortioultural Society, 1890, p. 18.

In England the common names, as collated by Sturtevant, are: Whorts or Whortleberries and Bilberries; in France, Airelle, Aurelle, Myrtilles, Myrtilles des bois, Bluete; or in Brittany Lucets, and in Normandy Mawrets. In Sweden they are called, in Upland, Blabar; in Smoland, Slinner; in Scania, Bollion; in Lapland, Zirre and Zerre. In Brabant the usual terms are, Crakebesein, Haverbesein and Postelbesein; in Germany, Heydelbeeren, Bickbeeren, Blawbeeren, Schwartzbeeren; or for some species, Drunkelbeeren, Rauschbeeren, Grosse Heidelbeeren, Moosheidelbeeren, etc.; in Italy, Myrtillo; in Russia, Ticherniza, Pjaniza, Goluble, etc.

DISTRIBUTION.

The genus includes about 125 species of wide geographic distribution, extending from the Arctic circle to boreal sub-tropical regions, and the high mountains of the tropics; most common in North America and the Himalayas. There are in North America proper about twenty-five species and in Mexico and Central America as many more. The Himalayan region is particularly rich in species many of which are epiphytic. With very few exceptions (e. g. erythrinum in Java and emirnense in Madagascar) the genus is unrepresented in the southern hemisphere and in the lower regions of the tropics.

The most widely distributed species are, perhaps, Myrtillus and uliginosum, which occur in middle and northern Europe, Asia (except in the central part from the Himalayas to Thianschan, where all vacciniums are absent), Canada and central North America southward to New York and Colorado, and westward to Alaska. Uliginosum, especially, is confined to northern and mountainous regions. Vitis-Idea, also, has a wide distribution somewhat similar to Myrtillus. It is common in the higher woodlands and mountains of middle and southern Europe, in America southward to New England, Lake Superior and British Columbia.

In several places in Germany, as stated by Drude,² wild hybrids between the foregoing species and *V. intermedium*, Ruthe, are not uncommon. The hybrids have evergreen foliage.

Sturtevant, Prans. Mass. Hort. Soc., 1890, 18.

^{*} Eng. and Prant. Pflanzenfamilien, 4:51.

Though erythrocarpon, of the southern Alleghanies, is not found in the old world, a very closely allied species, Iaponicum, is found in central Japan and China—these two species forming a unique type intermediate between the blueberries and the cranberries. In Japan Vaccinium is numerous in species, but, with the exception of the red fruited V. Japonicum and the black fruited V. ciliatum, they are not very abundant and are mostly confined to alpine summits where the species are found which in the extreme north encircle the earth; and blueberries nowhere cover the forest floor with the dense undergrowth which is common in our northern woods. 1

Of the purely American species, the most important ones are: in the East, caspitosum, Canadense, corymbosum, Pennsylvanicum and vacillans, together with the cranberries, macrocarpon, Oxycoccus and Vitis-Idaa; in the South, Myrsinites and virgatum; in the Northwest, myrtilloides and ovalifolium.

HISTORICAL NOTES.

The vacciniums have been strangely overlooked alike by horticulturists and by historians. Pliny, Vergil and Theophrastus make brief reference to them; Dodoens,² in 1578, and Gerarde^a and Parkinson in the early part of the seventeenth century give brief discussions of several forms. Parkinson says:^a "There are divers sorts of these low shrubs which must all go under the name of Whorts or Whorticberries, although there is much difference between them." He then describes nine different sorts, the first two being referred to as "Bilberries."

In America the fruit must have been used extensively by the Indians in colonial times, though there are few records of such use. Parkinson refers to Champlain who in 1615 found the Indians near Lake Huron gathering blueberries for their winter store. Kalm speaks of the Indians drying the fruit by the sunshine or by the fireside for winter use. Roger Williams mentions: "Attitaash (Whortleberries) of which there are divers sorts; sweet like currants.... Sautaash are these currants

¹ Sargent, Gard. & For. 6:254.

^{*} Lyte's Dodoens, 670. (1578)

^{*} Herballe, ed. 2, 1418. (1635)

^{*}Theatrum Botanicum, 1459. (1640)