

**THE HORTICULTURAL
STATUS OF THE
GENUS VACCINIUM**

Published @ 2017 Trieste Publishing Pty Ltd

ISBN 9780649298532

The Horticultural Status of the Genus *Vaccinium* by Welton Marks Munson

Except for use in any review, the reproduction or utilisation of this work in whole or in part in any form by any electronic, mechanical or other means, now known or hereafter invented, including xerography, photocopying and recording, or in any information storage or retrieval system, is forbidden without the permission of the publisher, Trieste Publishing Pty Ltd, PO Box 1576 Collingwood, Victoria 3066 Australia.

All rights reserved.

Edited by Trieste Publishing Pty Ltd.
Cover @ 2017

This book is sold subject to the condition that it shall not, by way of trade or otherwise, be lent, re-sold, hired out, or otherwise circulated without the publisher's prior consent in any form or binding or cover other than that in which it is published and without a similar condition including this condition being imposed on the subsequent purchaser.

www.triestepublishing.com

WELTON MARKS MUNSON

**THE HORTICULTURAL
STATUS OF THE
GENUS VACCINIUM**

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.

UNIVERSITY OF
CALIFORNIA

ITHACA, N. Y.
1901

SP: 10
25/14

1

NO. 1000
1000000000

1



CONTENTS.

	PAGE
Introductory	1
Common names	1
Distribution	2
Historical notes	3
Uses of the fruit	4
Use for ornamental planting.....	7
Propagation	8
Cultivation	10
The blueberry industry	12
White blueberries	18
Botanical notes	20
The natural groups of species	21
A horticultural classification	23
The most important species	25
Supplementary list of American species	42
The outlook	42
Bibliography	43
Index	47

1

2

3

4

THE HORTICULTURAL STATUS OF THE GENUS VACCINIUM.

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 *Gaylussacia*. 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.¹ 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 *Myrtillus*, and the fruit was known as myrtleberry. It is not improbable that the term Whortleberry is a corruption from myrtleberry (Cf. Prior, Pop. Names, Brit. Plts. 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 *h*, i. e., huckleberry. Others derive the name Whortleberry from the Anglo-Saxon *Asort-berg*, hart-berry, or as we would say, deer-berry. The question is discussed by Sturtevant in the Transactions of the Massachusetts Horticultural Society, 1896, 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.¹

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 vacciniurns 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-Idaea*, 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.

¹ Sturtevant, Trans. Mass. Hort. Soc., 1890, 18.

² Eng. and Prant. Pflanzenfamilien, 4:51.

Though *erythrocarpon*, of the southern Alleghanies, is not found in the old world, a very closely allied species, *Japonicum*, 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, *caspiotum*, *Canadense*, *corymbosum*, *Pennsylvanicum* and *vacillans*, together with the cranberries, *macrocarpon*, *Oryzococcus* and *Vitis-Idæa*; 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 Gerard³ and Parkinson in the early part of the seventeenth century give brief discussions of several forms. Parkinson says:⁴ "There are divers sorts of these low shrubs which must all go under the name of Whorts or Whortieberries, 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. . . . Sautaaash are these currants

¹ Sargent, Gard. & For. 6:254.

² Lyte's Dodoens, 670. (1578)

³ Herballæ, ed. 2, 1418. (1633)

⁴ Theatrum Botanicum, 1489. (1640)