We are unable to supply this entire article because the publisher requires payment of a copyright fee. You may be able to obtain a copy from your local library, or from various commercial document delivery services.

From Forest Nursery Notes Winter 2013

48. © **Propagation of** *Vaccinium membranaceum* and *V. myrtilloides* by seeds, hardwood stem, and rhizome cutting methods. McKechnie, I. M., Burton, P. J., and Massicotte, H. B. Native Plants Journal 13(3):223-234. 2012.



Figure 1. Fruit of Vaccinium myrtilloides. Photo by Tara Luna

PROPAGATION OF Vaccinium membranaceum

and V. myrtilloides

BY SEEDS, HARDWOOD STEM, AND RHIZOME CUTTING METHODS

Irene M McKechnie, Philip J Burton, and Hugues B Massicotte

ABSTRACT

Propagation trials were completed using seeds, hardwood stem cuttings, and rhizome cuttings from black huckleberry (Vaccinium membranaceum Douglas ex Torr. [Ericaceae]) and velvetleaf blueberry (V. myrtilloides Michx. [Ericaceae]) growing in central British Columbia, Canada. Seed germination success rates for V. membranaceum were 26.0% in 2006, 4.7% in 2007, and 66.0% in 2008, compared with 14.7% in 2006, 13.0% in 2007, and 28.5% in 2008 for V. myrtilloides. Germination rates for seeds sown directly after extraction from fresh berries were similar to those that had been air-dried for 48 h, and those stored for 1 y. Germination rates did vary significantly between Vaccinium species and among different years. Hardwood stem cuttings of both V. membranaceum and V. myrtilloides, taken in February, had low rooting rates (2.5%). Rooting hormone formulation, rooting substrate, and bottom heat failed to influence rooting success. Rhizome cuttings of V. myrtilloides had an 85% success rate, compared to 70% for V. membranaceum. Bottom heat significantly reduced the success rate of rhizome cuttings, whereas rooting substrate had no significant influence. Mass production of either *V. membranaceum* or *V. myrtilloides* plants was easiest by using seedlings grown from seeds; however, if clonal plants are desired (or a short production time required), rhizome cuttings might be the best option, rather than hardwood stem cuttings.

McKechnie IM, Burton PJ, Massicotte HB. 2012. Propagation of *Vaccinium membranaceum* and *V. myrtilloides* by seeds, hardwood stem, and rhizome cutting methods. Native Plants Journal 13(3):223–234.

KEY WORDS

velvet-leaf blueberry, black huckleberry, seed storage, growth substrate, rooting hormones, Ericaceae

NOMENCLATURE

USDA NRCS (2012)

CONVERSIONS

1 cm = 0.4 in °F = (°C x (9/5)) + 32