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10. © Boiled, tumbled, burned, and heated: seed scarification techniques for Munro's globemallow appropriate for large-scale application. Kildisheva, O. A., Dumroese, R. K., and Davis, A. S. *Native Plants Journal* 14(1):42-47. 2013.



Figure 1. Inflorescence of Munro's globemallow (*Sphaeralcea munroana*). Photo by Olga A Kildisheva

Boiled, tumbled, burned, and heated: seed scarification techniques for Munro's globemallow appropriate for large-scale application

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ABSTRACT

Physically dormant seeds of Munro's globemallow (*Sphaeralcea munroana* (Douglas) Spach [Malvaceae]) were scarified by boiling, tumbling, burning, dry-heating, and burning + heating treatments in an attempt to find an effective, operational, large-scale treatment for nurseries and restoration activities. Results indicate that out of the tested treatments, seed germination was highest following boiling water scarification (49%). All other treatments did not achieve significant improvements in germination compared to the control. Findings should improve the use of this cool-season perennial for restoration in the Great Basin, where its effectiveness in soil stabilization; its tolerance of disturbance, drought, and extreme temperatures; and its importance as a food source for animals make it a suitable candidate. In addition, the tested treatments should serve as a foundation for further method refinement.

Kildisheva OA, Dumroese RK, Davis AS. 2013. Boiled, tumbled, burned, and heated: seed scarification techniques for Munro's globemallow appropriate for large-scale application. *Native Plants Journal* 14(1):42–47.

KEY WORDS

Malvaceae, germination, physical dormancy, operational seed treatment, *Sphaeralcea munroana*

NOMENCLATURE

USDA NRCS (2011)