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USE OF AMPELOGRAPHIC METHODS IN THE IDENTIFICATION OF NOVA SCOTIAN GRAPE (*VITIS SPP.*) CULTIVARS

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In recent years the evaluation of suitable grape (*Vitis spp*.) cultivars for the Nova Scotia grape growing and wine industries has become increasingly important. Despite this, little material exists documenting the morphological characteristics of grape cultivars grown in Nova Scotia. This inevitably causes problems when attempting to identify unknown cultivars. The objectives of this study were to describe grape cultivars based on several ampelographic characteristics proposed by Galet (Galet, P. 1979. A Practical Ampeography: Grapevine Identification. Cornell University Press), and to evaluate these descriptors to determine their usefulness in identification. Twenty-nine cultivars were described based on thirty-two morphological characteristics including leaf colour, hair type and tendril placement. Measurements such as vein length ratios, leaf size and lobe depth were also considered. The results of this study provide a preliminary means of cultivar identification and allow grouping of cultivars based on certain characteristics. Results also show which characteristics are particularly useful in cultivar identification. For instance, indument, or hairiness, of the growing tip allowed cultivars to be divided into four primary groups. Other characteristics, such as tendril placement, were less useful as all sampled cultivars showed an identical pattern. Results were significant in that they provided concise cultivar descriptions that were not previously available, and an approach to cultivar identification that did not previously exist for Nova Scotian viticulture.

Laura Wiser graduated from Yarmouth Consolidated Memorial High School in Yarmouth, Nova Scotia, in 2006. She is currently completing her Honours thesis in her fifth year at Acadia University. To conduct her research, she received a NSERC (Natural Sciences and Engineering Research Council of Canada) Industrial Undergraduate Research Award. Next year she hopes to begin a Masters degree in plant biology.