

The Million Orchid Project: A non-traditional approach to orchid conservation and restoration

J.L. Downing^{*}, C.E. Lewis, and A. Padolf

Fairchild Tropical Botanic Garden, Coral Gables, Florida, United States of America

^{*}Corresponding author email: jdowning@fairchildgarden.org

Keywords: community engagement, orchids, student research, urban conservation

Ten years ago, Fairchild established the Million Orchid Project, now the largest and most successful public outreach program focused on orchids. The program is propagating endangered native orchids and planting them in urban areas in southern Florida and beyond. To date we have successfully planted hundreds of thousands of native orchids back into public spaces throughout South Florida with the goal of re-establishing one million plants in the region. Orchids are grown from seed in the micro-propagation lab at Fairchild, with tremendous assistance from volunteers, college students, and K-12 students. Plants are also produced on The STEMLab: Fairchild's mobile micro-propagation laboratory built within the frame of a decommissioned school bus. The project is unique in its scale, its focus on public spaces, and its involvement of the local community. More than 100 schools and 75 community partners have been enlisted to grow orchids in their classrooms and surrounding neighbourhoods. To date, school landscapes, parks, hospitals, and urban tree plantings have been the primary recipients of the reintroduction initiatives. At its core, The Million Orchid Project is a massive living science experiment that allows us to make important discoveries about how better to conserve orchids through propagation and develop more general strategies for rescuing rare plants within a highly developed urban environment.