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Effect of cutting age and substrate temperature on rooting of *Taxus globosa*

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Abstract *Taxus globosa* (Mexican yew) is a conifer endemic to México and Central America. It produces a substance known as taxol, which is useful in treatment of ovarian cancer. Because seed production for this dioecious tree is limited, and seed germination is extremely difficult, the use of cuttings could facilitate propagation of this species. With the intention of massively propagating individuals selected for taxol content, two trials were established in which the effect of substrate temperature (average temperatures 18 and 23°C), age (i.e., young vs. old shoots) and management of cuttings, as well as clone variation in rooting capacity, were evaluated. Low temperature favored rooting (53 vs. 34% on average for the two trials); younger shoots rooted three times (61 vs. 23%) more than mature ones, while basal wounding did not affect rooting capacity. A wide variation was found in rooting capacity of clones (8–76%), which could be associated with genetic or physiological differences among donor trees.

Keywords Age of cuttings · Cloning · Genetic variation · Rooting capacity · Substrate temperature · Yew

Introduction

Taxus globosa Schltld. (Mexican yew) is endemic to Mexico and Central America, and is subjected to special protection because of its restricted natural distribution (SEMARNAT

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