# INDOLE-3-ACETIC ACID AND ROOTING OF *ARUNDO DONAX*

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# ABSTRACT

## INDOLE-3-ACETIC ACID AND ROOTING OF

## *ARUNDO DONAX*

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The rooting behavior in differently orientated stems of *Arundo donax* was characterized throughout the season. Rooting efficiency of *A. donax* was significantly different between hanging and upright stems and growing and non-growing seasons. Exogenous IAA at 5 or 10 μM affected rooting efficiency, and mask the effect of stem orientation. The patterns of endogenous IAA in hanging and upright stems were similar to the rooting efficiency patterns, with respect to both stem orientation and season. However, the former ran one month behind the later. The different endogenous IAA concentrations between hanging and upright stems were partially explained by the activity of the enzyme involved in IAA synthesis, which was higher in hanging stems. Rooting of *A. donax*, and endogenous IAA concentration appeared to be controlled by seasons and orientations. The activity of the IAA synthetic enzyme should be a key factor in the control of the endogenous IAA concentration.



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