

## Abstract

The aim of these experiments was to determine whether exposure to leaf-canopy shade induces a light requirement for germination in *Bidens pilosa* seeds.

Seeds of this species were pretreated by placing them in the shade of a natural canopy for 12 days and then setting half of them to germinate in full light and the other half in darkness.

Canopy-treated seeds acquired a marked light requirement. The pretreatment was more effective if the seeds were imbibed during it. Fresh and old seeds gave similar results.

In a second experiment the effect of time of exposure to canopy shade on the induction of a light requirement was investigated. It was found that only 1 h exposure to leaf-transmitted light is required to induce an almost complete light requirement in this species. The ecological implications of the results are discussed.