

ABSTRACT

Studies on *in vitro* propagation of *Aechmea nudicaulis* (L.)
Griseb. And *Aechmea dichlamydea* var. *trinitensis* L.B. Smith

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Using explants from aseptically grown seedlings, the best explant, most favourable cultural conditions and most suitable medium for shoot multiplication were determined for *in vitro* propagation of *Aechmea nudicaulis* (L.) Griseb and *Aechmea dichlamydea* var. *trinitensis* L.B. Smith.

This information was applied to *in vitro* propagation of both species using shoot-tips and axillary buds of mature plants as explants, on a medium consisting of basal MS (1962) medium modified (MSm) containing NAA (1.8 mg/L), IBA (2.0 mg/L) and BA (1.0 mg/L).

Further investigations using shoots-tips of *in vitro* shoots stabilized on MSm medium as explants, indicated that the best medium for *in vitro* propagation of *A. nudicaulis* was MSm plus NAA (1.8 mg/L), IBA (2.0 mg/L) plus BA (1.5 mg/L) and that for *A. dichlamydea* was MSm plus IBA (2.0 mg/L) plus BA (0.5 mg/L).

In vitro derived shoots (0.5 - 1.0 cm) long, rooted on MSm medium within 1.75 months. After 3-4 months they were successfully established *ex vitro*.

Growth of axillary shoots of both species was induced on media containing the auxins NAA, IBA or IAA.

MSm was found to be a shoot multiplication medium for germinating seeds of *A. dichlamydea* var. *triintensis*.