

# Aluminum

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## Abstract

Aluminum, a light metal, is ubiquitous in soils. At low pH, toxic Al species can form which inhibit plant root growth and thereby limit ecosystem productivity. The occurrence of toxic Al species in soils and the effect of these forms on plant physiology and root growth are reviewed. Agricultural management practices aimed at limiting Al toxicity and plant-based Al resistance mechanisms are also discussed.

**Keywords:** Polymerization; Toxicity; Tolerance; Amelioration; Complexation; Speciation; Cell wall; Apoplast; Symplast; Cytoplasma

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