

# Quinoa varieties respond to salt in different ways

**Researchers from the Laboratory for Plant Breeding studied the growth and development of two quinoa varieties that were given water with increasing salt levels.**

One of the quinoa varieties, Pasto, developed a preservation strategy, limiting its water uptake and therefore its growth. By contrast, the other variety, selRiobamba, developed a greedy strategy of growing as fast as possible in spite of the salt stress. The result is important for plant breeders wanting to develop new salt-tolerant crops, reports first author Viviana Jaramillo Roman in *Frontiers in Plant Sciences*.

Salinization of farmland is a growing problem around the world. Seed producers want new varieties that grow well in saline soils, but salt tolerance is a highly complex trait that involves multiple genes, which this research has identified. The research was done at the Netherlands Plant Eco-phenotyping Centre (NPEC) at WUR, where researchers precisely measure the effects of stress factors such as saltwater on the development of plants. The researchers measure, for example, the transpiration of the plants every three minutes for 11 weeks. [AS](#)