

Ciaglo, James (1989). "Size Hierarchy Development in Experimental Populations of Sand Dune Annuals *Atriplex Patula* and *Salsola Kali*".

The purpose of this experiment was to examine the degree of size inequality that develops among seedlings that are exposed to high (such as those experienced in beach environments) and low-density growth communities. The study took place over a six week period, using biomass at four, five, and six weeks to compare the different effects of growth density. Furthermore, the study looked at seedling emergence time to examine the effects of the latter on size hierarchy development. The study found that many of the high density plots had high (>50%) mortality rates, and those that did survive did not emerge synchronously. *S. kali* experienced a relatively large mortality rate at low density, which may have been due to its morphology. For both species, plants growing at lower densities were significantly larger than those that grew in high-density situations. Size hierarchies increased in degree from weeks four to six in high-density plots and were present to a lesser extent in the low-density plots.

(summary)