

The emergence of direct seeded vegetables can be reduced by numerous environmental and physical stresses which commonly occur at the time of sowing in Florida. Temperature extremes, heavy rainfall, drought, and soil compaction can greatly alter total plant stands and seedling uniformity. A number of seed priming treatments improved germination and emergence of cabbage (*Brassica oleracea* L), carrot (*Daucus carota* L), celery (*Apium graveolens* L), tomato (*Lycopersicon esculentum* Mill.), pepper (*Capsicum annuum* L), and lettuce (*Lactuca sativa* L). An additional improvement in stand uniformity for a number of crops was obtained when seeds were sown with soil amendments. Use of the gel-mix (peat:vermiculite:gel combination) and/or calcined clay amendments (GrowSorb) greatly improved emergence and plant uniformity in pepper, tomato, cabbage, and lettuce sown under temperature stress.