

Seeds of mycoheterotrophic plants known as dust seeds which are typical for the family Orchidaceae and 11 other families have inner (physiological, morphological) and outer (physical) dormancy. Dormancy breaking it is a necessary step for a seed to germinate. For breaking the exogenous dormancy it is necessary to break both inner and outer testa, which can be done by scarification. Chemical scarification, mostly done by chlorine, is commonly used and it seems to be the best way for breaking dormancy and also for sterilization of seeds. Other sterilization agents as ethanol and sulfuric acid are also commonly used. For breaking the inner (physical) dormancy, application of growth regulators can be useful, especially in the case of cytokinins, specifically kinetine. Abscisic acid induces dormancy and ethylene induces germination. Anorganic forms of nitrogen have also inhibitory effects for germination at least for some species. Seeds of most orchid species also need a period of chilling after sowing and for germination they mostly need temperature around 23°C.