Physical dormancy

Seeds with physical dormancy require **scarification** to allow them to imbibe water. The three most common ways to scarify seeds include hot water, acid, or scratching the seed surface.

Hot water treatment can be accomplished by dropping seeds in water that has just begun to boil. Remove the boiling water container from the heat source and allow the seeds to soak for 1 to 10 minutes depending on the seed type. Too long an exposure to the hot water can kill the seed. This works for many seeds with physical dormancy, but usually only a small percentage of seeds become able to absorb water.

Acid treatment involves soaking the seeds in concentrated sulfuric acid for 30 to 120 minutes. Following treatment, the acid is drained from the seeds and the seeds quickly rinsed to remove the remaining acid. Since sulfuric acid and water react together to generate heat, improper rinsing can kill the seeds. This is a very effective way to treat seeds with physical dormancy. However, working with acid can be dangerous. It is only recommended for professional nursery workers where proper safety equipment is available.

Scratching the seed surface with a small file is the recommended method for scarifying small batches of seeds. The outer few layers of the seed covering should be scratched through with the corner of the file. The seed only needs to be scratched at one location. This allows water to penetrate the seed.