

Pollen Processing

Pollen processing takes place at the lab located at the Aidie Creek Seed Orchard in Chamberlain Township. This lab has been equipped to dry, test, process and freeze dry pollen. Pollen storage facilities exist at the lab with a back-up storage location in Timmins.



Pollen viability is at its highest just prior to pollen shed. Pollen flowers are picked, like berries, into small doubled paper bags. These bags are then shipped to the lab for processing. The pollen flowers must be dried before the pollen can be extracted. The bags are placed in a drying room for approximately 2 days. The pollen will now be visible in the bottom of the bag, and can be processed.



In order to maintain the purity of each pollen lot, every effort is made to eliminate contamination between the collection bags. Each pollen lot is processed individually under a fume hood. This device exhausts any loose pollen to the outdoors. An alcohol solution is used to further decontaminate processing equipment.



Under the fume hood, the contents of the collection bag is poured onto a screen. The loose, dried pollen then filters through the screen and funnels into a storage vial. The flowers themselves are discarded.



Pollen viability is tested prior to storage. Prepared testing plates are dusted with pollen and left to germinate for 24 hours. The individual pollen grains are then counted under a microscope to determine their viability. Pollen grains are living, breathing organisms and must be treated with care throughout the entire process.



If the pollen is needed for "hot pollinating" in the current year, it is transferred into applicators that will be used in the field. Pollen for long term storage is placed in 15 mg. glass vials. Each vial is identified with the number that is unique to each pollen lot.



For short term storage, pollen can be placed in a dessicator. These unit will minimize moisture buildup inside the vials that can lead to a drop in viability. For long term storage of a year or more, pollen is freeze dried and vacuum sealed and placed in a freezer. Pollen can successfully be stored for many years with little or no drop in viability.



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