Project Update: October 2020

Pre-treatment of *Securidaca longepedunculata* seeds

a) Seed cleaning and sorting

This was done to achieve high quality seeds for propagation by removing impurities such as leaves seeds of other species and pest-infested seeds.

Left: S. longepedunculata seeds well spread out for ventilation. Right: Pest-infested seed after cut-testing. ©Gerald Kaniaru

b) Breaking dormancy

Mechanical scarification was done using a scalpel blade taking care not to injure the internal portion especially the radicle.

Processing of *S. longepedunculata* seeds using a scalpel blade. © Collins Masinde

The processed seeds were soaked in tap water (tap water treatment) for 24 hours before planting. Only seeds that imbibed the water were sown.

Seed Sowing

Sowing of the violet plant seeds was done in the laboratory and in the propagator to test for differences in viability across the different conditions. Different media for propagation was used namely: Habitat soil, vermiculite, sand, forest soil and sawdust.


Left: S. longepedunculata seeds propagated in containers to be kept in a germination cabinet for germination. ©Gerald Kaniaru. Right: Mr. Gerald Kaniaru, the project principal investigator sowing S. longepedunculata seeds in a non-mist propagator. ©Jonathan Sila.


S. longepedunculata Seeds sown in a non-mist propagator. © Gerald Kaniaru

Growth monitoring and germination scoring

S. longepedunculata seedlings growth in the laboratory. © Gerald Kaniaru.

Top left, top right & Bottom left: *S. longepedunculata* seedlings growth in the non-mist Propagator. ©Gerald Kaniaru. Bottom right: Transplanting of *S. longepedunculata* seedlings from the propagators into the potting tubes. ©Gerald Kaniaru.

Securidaca longepedunculata seedlings potted in National Museums of Kenya Glasshouse for further growth and maturation. The pots were filled up with proper potting mixture and watered.

Left: Potted with appropriate recommended potting mixture. Right: Watering the potted media awaiting transplanting.

Potted seedlings in the potted media. ©Gerald Kaniaru.