

Seed Propagation Protocol Form



SEED PROPAGATION PROTOCOL

This form collates the information about the best method for seed propagation and growing up of the target species.

Authorship (*people that contributed propagation information*):

Date of publication:

Logo/s of the affiliated organisation(s):

GENERAL INFORMATION

| | | | | | |
|------------------------|---|--|------------------------------|---|--|
| Taxon name | <i>Scientific name of the propagated species</i> | | Name/s of propagator/ | <i>Name(s) of the person or people that carried out the propagation</i> | |
| Family | <i>Plant family of the propagated species</i> | | Organisation | <i>Organisation(s) where the propagation was carried out</i> | |
| Origin of seeds | <i>Site(s) and country where seeds were collected</i> | | Site and country | <i>Site(s) and country where the propagation took place</i> | |

SEED DESCRIPTION & PROCESSING

Description of the seeds and the processing of the seeds before seed sowing.

| | | |
|---|--|--|
| Time of year for seed collection | <i>List month/s of the year when seed collection is best</i> | |
| Fruit/seed transport | <i>Describe how fruit/seeds have been stored during transport from the field to the nursery</i> | |
| Processing of fruits/seeds | <i>Describe how the fruits/seeds are processed in situ or in the nursery (seed extraction methods, seed cleaning, handling of fruits/seeds...)</i> | |
| Method to assess seed viability | <i>Describe method used to estimate seed viability (e.g. floating test, cut test, tetrazolium test, X-ray test)</i> | |
| % Estimated seed viability | <i>(Number of viable seeds) x 100 / (Total number of seed for which viability was estimated)</i> | |
| Type of seed | <i>Choose one of these options: Orthodox, Intermediate, Recalcitrant or Unknown</i> | |
| Seed size | <i>Include a measuring unit (e.g. mm, cm...)</i> | |
| Number of seeds per gram | <i>Count a reasonable number of seeds and weigh them. Then, divide the number of seeds by their weight (e.g. 100 seeds / 5 g = 20 seeds/g)</i> | |
| Seed storage | <i>If seeds have been stored before germination, mention storage facilities (seed bank, fridge, freezer), and describe conditions (humidity, temperature), type of container, and storage time length.</i> | |

+ **Add photographs of the fruit and seeds. Make sure to include a detailed description of the photo, such as the growth stage, date, activity or process.**

SEED PROPAGATION PROTOCOL

GERMINATION

Description of procedures, materials for seed germination and the germination success.

| | | | |
|------------|---|--|--|
| Procedures | Seed treatment | <i>Describe treatment applied to the seed before sowing (e.g. mechanical scarification, chemical scarification, soaking, stratification, smoke treatment...). If applied, include the duration of the treatment.</i> | |
| | Seed sowing media | <i>Media composition: include percentages/ratio for the different components</i> | |
| | Container | <i>Describe size and material of the container in which seeds are sown</i> | |
| | Seed spacing | <i>Describe the recommended spacing between the seeds when sown. Include a measuring unit (e.g. mm, cm...)</i> | |
| | Seed depth | <i>Describe how deep the seeds are sown. Include a measuring unit (e.g. mm, cm...)</i> | |
| | Watering technique | <i>Describe watering tool, technique and frequency during sowing and germination</i> | |
| | Germination facilities | <i>Describe the facilities where the germination of seeds took place (e.g. close case, outdoor shaded area, heated bench, covered/bagged container...)</i> | |
| | Environmental conditions | <i>Describe the environmental conditions where germination took place (temperature, humidity, and photoperiod)</i> | |
| Success | Time of year for seed germination | <i>List month/s of the year when seed germination is best</i> | |
| | Duration until germination | <i>Average number of days/months/years until seeds germinated</i> | |
| | % Germination success | <i>$(\text{Number of seeds germinated}) \times 100 / (\text{Total number of seeds sowed})$</i> | |
| Materials | <i>List the materials needed for seed germination to help with the planning of this activity. E.g. trays, sieves, dibbers, labels, ruler...</i> | | |

+ **Add photographs of the germination process. Make sure to include a detailed description of the photo, such as the growth stage, date, activity or process.**

SEED PROPAGATION PROTOCOL

FIRST POTTING

Description of procedures and materials for the cultivation of the plants and the success of the growing of the plants.

| | | | |
|------------------|---|--|--|
| Procedures | Growing Media | <i>Media composition: include percentages/ratio for the different components</i> | |
| | Container | <i>Describe size and material of the container in which plants are potted</i> | |
| | Fertiliser | <i>If used, include: type (organic or inorganic); nutrient composition and its ratio; and application (added to soil, dissolved on water, foliar application)</i> | |
| | Watering technique | <i>Describe watering tool, technique and frequency while growing the plants</i> | |
| | Plant growing facilities | <i>Describe the facilities where the plant growing took place (e.g. glasshouse, outdoors, shaded area...)</i> | |
| | Environmental conditions | <i>Describe the environmental conditions where the plant growing took place (temperature, humidity, light levels)</i> | |
| Success | Number of days until first potting | <i>Average number of days since the start of seeds sowing until first potting</i> | |
| | Duration until established plants | <i>Average number of days/month/years for which the plant growth was monitored until the establishment of plants</i> | |
| | % Plants established | <i>$(\text{Number of plants established}) \times 100 / (\text{Total number of plants potted})$</i> | |
| | Health observations | <i>Record any signs of pest or disease, nutrient deficiency, damage... and the stage when they were observed (e.g. during germination, growing of seedlings, growing of plants...)</i> | |
| Materials | <i>List material needed for potting to help with the planning of this activity. E.g. pots, dibbers, labels...</i> | | |

- + **Add photographs of the pricking out, potting, and the growing of plants. Make sure to include a detailed description of the photo, such as the growth stage, date, activity or process.**