Vegetative Propagation Protocol Form for Air Layering

BGCI | Propagation Protocol Forms 2024

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| **VEGETATIVE PROPAGATION PROTOCOL: AIR LAYERING**  |

**This form collates the information about the best method for air layering of the target species.**

Authorship *(people that contributed propagation information)*:

Date of publication:

*Logo/s of the affiliated organisation(s):*

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| **GENERAL INFORMATION** |
| **Taxon name** | *Scientific name of the propagated species* |  | **Name/s of propagator/** | *Name(s) of the person or people that carried out the propagation* |  |
| **Family** | *Plant family of the propagated species* |  | **Organisation** | *Organisation(s) where the propagation was carried out* |  |
| **Site and country** | *Site(s) and country where the propagation took place* |  |

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| **AIR LAYERING** |
| **Description of procedures, materials and success of the air layering.**  |
| **Procedures** | **Position of air layering** | *Explain in detail the location of the air layering in relation to buds and describe the maturity of the stem (soft wood, semi-hard wood, hard wood). Illustrate with photographs below* |  |
| **Cut to the stem** | *Describe the cut made to the stem (e.g. cutting a ring of the bark, upward slanted-cut…)*  |  |
| **Rooting hormone** | *If used, type of rooting hormone (liquid, powder or gel), which active ingredients (IAA, NAA & IBA) and concentration* |  |
| **Rooting media** | *Media composition: include percentages/ratio for the different components* |  |
| **Wrapping technique** | *Describe the wrapping of the rooting media and material used (e.g. air layering balls, plastic and foil...)* |  |
| **Moisture maintenance** | *Describe how to keep the media moist (e.g. adding water, hydrogel, changing the moss…) and monitoring frequency*  |  |
| **Type of environment** | *Describe the environment where air layering took place (e.g. glass house, outdoors, in situ...)*  |  |
| **Environmental conditions** | *Describe the environmental conditions where air layering took place (temperature, humidity)* |  |
| **Success** | **Time of the year for air layering** | *List month/s when air layering is best* |  |
| **Duration until rooting** | *Average number of days/months/years until roots were visible in the air layering* |  |
| **% Air Layer success** | *(Number of new plants rooted) x 100 / (Total number of air layering attempted in mother plant)* |  |
| **Materials** | *List of materials needed for air layering to help with the planning of this activity. E.g. aluminium foil, plastic bags, hydrogel, strings…* |  |

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

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| **VEGETATIVE PROPAGATION PROTOCOL: AIR LAYERING**  |

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| **FIRST POTTING**  |
| **Procedures and materials for the cultivation of the plants and the success of the growing of the plants.** |
| **Procedures** | **Growing Media** | *Media composition: include percentages/ratio for the different components* |  |
| **Container** | *Describe size and material of the container in which plants are potted* |  |
| **Fertiliser** | *If used, include: type (organic or inorganic); nutrient composition and its ratio; and application (added to soil, dissolved on water, foliar application)* |  |
| **Watering technique** | *Describe watering tool, technique and frequency while growing the plants* |  |
| **Plant growing facilities** | *Describe the facilities where the plant growing took place (e.g. glasshouse, outdoors, shaded area...)* |  |
| **Environmental conditions** | *Describe the environmental conditions where the plant growing took place (temperature, humidity, light levels)* |  |
| **Success** | **Number of days until first potting** | *Average number of days since air layering was prepared until first potting* |  |
| **Duration until established plants** | *Average number of days/month/years for which the plant growth was monitored until the establishment of plants* |  |
| **% Plants established**  | *(Number of plants established) x 100 / (Total number of plants potted)* |  |
| **Health observations** | *Record any signs of pest or disease, nutrient deficiency, damage… and the stage when they were observed (e.g. during rooting, growing of plants.…)* |  |
| **Materials** | *List material needed for potting to help with the planning of this activity. E.g. pots, dibbers, labels…* |  |
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* ***Add photographs of the potting process and the growing of plants. Make sure to include a detailed description of the photo, such as the growth stage, date, activity or process.***