

Summary - ZZ plant Propagation Techniques

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PLNT 310 Plant Propagation

Objectives

- Demonstrate different leaf cutting techniques for ZZ plant propagation
- Propose the best propagation technique for ZZ plant

Species used

Zamioculcas zamiifolia (Lodd.) Engl. is a stemless tropical plant from the Araceae family that is native to eastern Africa (Chen and Henny, 2003). This herbaceous perennial has thick and fleshy petioles arising from tuberous fleshy rhizomes and long leaves with many shiny, waxy leaflets. ZZ plants are easy to care for: they grow under low light conditions and tolerate drought stress, they are also pest-free and disease resistant (Chen and Henny, 2003). Overall, their polished leaflets and easy-to-care-for characteristic make the ZZ plant popular among ornamentals.



Technique used

Leaf cuttings

Retrieved from: <http://bomets.com/?p=1734>

Leaf cuttings simply consist of propagating entire leaves, with or without petiole, or a section of a leaf which will develop adventitious roots and shoots and eventually generate a new plantlet (Bareja, 2010; Donnelly, 2015). The adventitious roots form at the base of the leaf blade, leaflet or petiole in response to wounding. Some plants also form a callus - a proliferation of parenchyma cells - at the wounded site from which new roots and shoots emerge (Donnelly, 2015). There are different types of leaf cuttings that can be done, such as whole leaf with or without petiole, split vein and leaf sections.

ZZ plant has pinnately compound leaves with alternate to sub-opposite leaflets. Stock plant cuttings were subjected to nine treatments to test the effects on rooting success and to determine the best propagation technique for this peculiar foliage plant. For this project, cuttings were made that included leaflets and rachis (or petiole).

Recommendation

The best treatment for successful ZZ plant propagation was entire leaflet cuttings as it resulted in the highest mean of root number and root length, and has the potential to produce more material while using less space.

Further reading and References

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A little about the author

Greetings! I am Johana Rodriguez, a U3 student of Environmental Biology, Wildlife Biology Specialization, at McGill University (Macdonald Campus). Although animals are the main focus of my specialization, my passion for plants started ever since Mom taught me how to garden at home when I was about 7 years old! I hope this video tutorial helps you understand and love these fascinating creatures a little more!



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