

Standardization of Propagation Techniques for *Celastrus paniculata*: An Endangered Medicinal Plant of Western Ghats

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Abstract : An experiment was conducted at College of Horticulture, Mudigere to study the effect of different growth regulators on seed germination and vegetative propagation by cuttings of *Celastrus paniculata* an endangered medicinal plant. The extracted seeds are subjected to 11 different pre-soaking treatments which include control, GA3 at 300, 350, 400ppm, KNO3 at 1.0%, 1.5%, 2.0%, H2SO4 at 0.5%, 1.0% and HCl 0.5%,1.0% for 100 seeds per treatment. Among the different germination inducing treatments, seeds treated with gibberellins responded well with high seed germination and vigorous seedling growth. The seeds treated with GA3 400 ppm recorded maximum germination and growth parameters like rate of germination, shoot length, root length, plant vigour, fresh and dry weight of which was followed GA3 350 ppm. The commencement of germination and 50 per cent germination was also earlier in the same treatment. The cuttings of *C. paniculata* took more time for root initiation up to four months and sprouting percent was moderate as compared to other easy to root species. Among different treatments, IBA 2000 ppm was found to be the best, which recorded the maximum shoot and also root parameters. The results of present investigation will be helpful for conservation of this endangered medicinal plant through propagation

Keywords : conservation, germination, growth, germination, propagation

Conference Title : ICMNP 2015 : International Conference on Medicinal Plants and Natural Products

Conference Location : Paris, France

Conference Dates : July 20-21, 2015