FACULTY OF SCIENCE
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Title : The Effect of Temperature on Seed Germination of "*Nyssa javanica, Ficus semicordata and Ficus callosa*"

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ABSTRACT

Climate change has resulted in rising temperatures across many regions, particularly in mountainous areas. This may affect plants that have distribution ranges at high elevations. This study aims to examine the impact of temperature on the seed germination of three evergreen plant species: *Nyssa javanica*, *Ficus callosa* and *Ficus semicordata*. Seed germination was assessed under four different temperature regimes in a controlled plant growth chamber, with each temperature level featuring distinct daytime and nighttime temperatures of 20°C/10°C, 25°C/15°C, 30°C/20°C, and 35°C/25°C. Each temperature condition was conducted in three replicates.The results showed that *Nyssa javanica* seeds failed to germinate under all temperature conditions. *Ficus callosa* seeds exhibited the highest germination rate at 25°C/15°C, while *Ficus semicordata* seeds germinated best at 20°C/10°C, with germination rates of 66.66% and 53%, respectively. These findings indicate that temperature significantly affects the germination of these two plant species. The data obtained can be used to predict the potential impacts of climate change on their future distribution.

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