

Joint Event

Hematology, Immunology & Traditional Medicine

December 05-06, 2018 | Lisbon, Portugal

Determination of the ideal conditions for germination, desiccation tolerance, and storage of gabirola seeds

Campomanesia pubescens (DC.) O Berg, commonly known as gabirola, is a shrub native to Brazil that is distributed throughout the Cerrado region of the above-mentioned country. The species has medicinal properties: anti-inflammatory and antioxidants. It holds significant commercial potential for cultivation. The objective of this work was to evaluate the storage of seeds of this species at different temperatures and humidity levels. Fruits were collected at the beginning of November 2014 from plants in a rural area of the municipality of Jatai. The fruits were processed, and the seeds were extracted in the Laboratorio de Sementes at the Instituto Federal Goiano, Campus Rio Verde. The research was divided into three distinct trials. In the first trial, the ideal temperature for germination was tested for seeds with a natural water content of 44%. Meanwhile, the second tested the desiccation tolerance of the seeds. Finally, the third trial determined their ideal storage conditions. The experimental design that was adopted for each trial was completely randomized in a factorial scheme, with four repetitions for each condition; each experimental plot consisted of 25 seeds. The germination was most effective at 30°C, while the presence or absence of light could, in certain cases, have a physiological effect. Meanwhile, seeds with water content between 28 and 37% could be stored for up to 20 days at 20°C and still remain viable. Finally, a temperature of 10°C was best suited for the storage of seeds with a water content of 44%.

Biography

Juliana de Fatima Sales has completed her PhD in Plant Science at the Federal University of Lavras. Currently, she is a Professor at the Federal Institute of Education, Science and Technology Goiano/Campus Rio Verde, Goias, Brazil, since 2006. She is a Permanent Lecturer in the Post-graduate program in Agricultural Sciences (Master's and Doctoral level), worked as Coordinator and completed her Post-graduate degree in Biodiversity and Conservation (Master degree) of the IF Goiano/Rio Verde Campus. She has experience in the field of seed physiology of medicinal and fruit species native to the cerrado, and cultivated species.

juliana.sales@ifgoiano.edu.br



Juliana de Fatima Sales

Goiano Federal Institute of
Education-Campus Rio Verde, Brazil

Co-Authors

**Erica Virginia Estefane de Jesus Amaral, Jacson
Zuchi, Jose Maria Gomes Neves and Jefferson
Fernando Naves Pinto**

Goiano Federal Institute of Education-Campus Rio
Verde, Brazil

Notes: