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General Information

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410. STORAGE OF *Mimosa caesalpinifolia* Benth. SEEDS.

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The longevity of seeds is a characteristic of each species and storage under appropriate conditions is a key strategy to maintain viability for longer period of time, once the seed quality is not improved by storage, but can be maintained with minimal possible deterioration through proper storage. Therefore aim of this study was to determine the best conditions and storage periods to maintain the viability and vigor of *Mimosa caesalpinifolia* Benth. seeds. The experiment was conducted at the Laboratory of Seed Analysis (CCA - UFPB), followed by a completely randomized design and the treatments consisted of seeds in three different packages (kraft paper bag, cotton cloth and packaging foil) and stored in three environments: natural laboratory ambient (± 25 °C and 74.5% RH), refrigerator (6 ± 2 °C and 90% RH) and cold (16 °C and $\pm 90\%$ RH) for a period of 315 days. The characteristics evaluated were: water content, percentage and germination speed, length and seedling dry weight. After 225 days of storage the germination and vigor of *M. caesalpinifolia* packaged in all packaging and ambients have drastically reduced. The storage under the conditions studied is effective to preserve the physiological quality of seeds up to 225 days.

Keywords: Germination; natural ambient; controlled conditions; vigor

Acknowledgements: CCA-UFPB

411. MORPHOLOGICAL EVALUATION OF FRUITS AND SEEDS OF *Bertholletia excelsa* H.B.K. (LECYTHIDACEAE).

¹Garcia L. C.; ¹Sousa, S. G. A.; ²Ribeiro, F. V.; ²Santos, R. M. ¹Empresa Brasileira de Pesquisa Agropecuária (Embrapa Amazônia Ocidental), Manaus-AM, Brazil. lucinda.carneiro@cpaa.embrapa.br. ²Fundação de Amparo à Pesquisa do Estado do Amazonas/Universidade do Estado do Amazonas (FAPEAM/UEA/EMBRAPA - fellows), Parintins-AM, Brazil

Bertholletia excelsa H. B.K (tree brazil nut) is a of the symbol Amazon trees due to their social, ecological and economical for the region. The aim of this study was to evaluate morphological characteristics of fruits and seeds of 15 sites with trees brazil nut, the phytogeographical region of Parintins Amazonas State, Brazil. Was collected in the 2009/2010 harvest, 80 fruits of two sites (San Sebastian; Our Lady of the Rosary), with trees brazil nut. We evaluated height, diameter, fresh weight of fruit, seed number and seed weight / fruit. The morphological analyses allowed the following observations: fruits of the site 1 weighing from 390g to 813g; fruits containing from 13 seeds to 25 seeds, weighing from 105g to 258g the seed / fruit. Brazil nuts (almonds) fresh with shell weighed from 5g to 15g. The site 2 was observed fruit from 483g to 803g. Fruits containing from 12 seeds to 18 seeds, weighing from 101g to 173g /fruit. Brazil nuts (almonds) fresh with shell weighed from 6g to 12g. Fruits of site 1 (San Sebastian) have larger and heavier fruit, yet it had a lower number of seeds per fruit, weight of seeds per fruit and lower weight per nut (almond), when compared with the values observed in fruit and seeds of the site 2 (Our Lady of the Rosary). Based on the results preliminary conclusion is that fruit and brazil nut seeds of the two studied show wide variation morphological characteristics that may contribute significantly to selection of germplasm to establishment of breeding programs and the incorporation of this species in commercial plantations to ex situ plant conservation of *Bertholletia excelsa*.

Keywords: *Bertholletia excelsa*, forest seeds, morphologic seed, Amazon

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