

# The role of fleshy pericarp in seed germination and dispersal under flooded conditions in three wetland forest species

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In flooded habitats, inundations affect important forest regeneration processes, such as seed dispersal and germination. The main seed dispersal mechanism used by species in Austral South American temperate swamp and riparian forests is endozoochory, which releases seeds from the fleshy pericarp. Endozoochory could be favorable or unfavorable in wetland habitats, since this mechanism exposes seeds directly to water and can, in some cases, be detrimental to germination. In this study, we studied whether or not the fleshy pericarp favors germination after the flooding period's end. Furthermore, we quantified if the number of days which the fruit was found to be floating related to its germination success. We used the seeds of three common fleshy fruit species of flooded habitats from southern Chile, the trees *Luma apiculata* and *Rhaphithamnus spinosus*, and the vine *Luzuriaga radicans*. We simulated flooding periods of 7, 15, 30 and 45 days submerging seeds, with and without pericarps, in w