Summary

Because of its agronomic characteristics, the legume Calopogonium mucunoides Desv. is an important pasture forage in the Brazilian Amazon region. Seeds play an important role in supplying new cultivated pastures. However, seed germination in the field is affected by a series of soil-related environmental factors. Therefore, the effects of soil pH, aluminum content, and salinity on the germination of C. mucunoides seed was studied. The results showed that soil pH (when ranging from 3.0 to 11.0) had no effect on seed germination. Soil aluminum at a concentration of 2.0 meg/100 ml reduced seed germination by 6% compared with the check, but no significant effects were observed for concentrations below 2.0 meg/100 ml. The relationship between salinity and seed germination was quadratic, the effects of salinity being more notorious with concentrations above 75 mM NaCl.