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Assessment of the Efficiency of Disinfectants and Their Influence On the Germination of *Brachiaria* Seeds for in Vitro Culture Purposes.

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Brachiaria species predominate in the pasture areas of Brazil, mainly because of their relative tolerance to unfavorable growth conditions. Further amelioration of *Brachiaria* foraging performance is to be achieved through biotechnological approaches, and tissue culture protocols are expected to play an important role in such attempts. Contamination is one of the major constraints for progress in *Brachiaria* tissue culture, particularly if seeds are to be cultured, since many microorganisms inhibit seed germination and seedling development. The purpose of this work was to verify the contribution of three disinfectants and two times of immersion on the efficiency of seed disinfection in *B. decumbens*. The essay was carried out in a complete randomized design, with four replications. Seeds were pretreated with 70% alcohol for 30 min and subsequently immersed in either 1% sodium hypochlorite (for, respectively, 18 and 24 h), 0.1% benzalkonium chloride (for, respectively, 5 and 10 min), or 1% mercury chloride (for, respectively, 2 and 10 min). The following variables were analyzed: incidence of contamination by microorganisms, seed germination rate, and number of in vitro introduced seedlings. The results revealed that mercury chloride was extremely toxic to seeds, whereas the other treatments showed no significant differences regarding the percentage of contamination. The best seed germination and number of in vitro viable plants were achieved with 18 h of immersion in sodium hypochlorite.