

Title            Application of antioxidant on coffee seeds (*Coffea arabica* L.) aiming at quality preservation.  
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#### **Abstract**

To verify the effect of the application of antioxidants during degumming or after drying as a pre-germinative treatment or on the preservation of the physiological quality of coffee (*Coffea arabica* cv. Rubi) seeds during their storage, an experiment was conducted in the Federal University of Lavras, Minas Gerais, Brazil. Treatments comprised: four solutions (water, 2000 ppm ascorbic acid, 2000 ppm EDTA and 25% lemon solution), two application methods of the solutions (degumming or after drying), with or without fungicidal treatment, and two seed treatments (tocopherol solution diluted in soyabean oil). The evaluation of physiological quality was accomplished before and after 4- and 8-month storage via tests on germination, electric conductivity, and seedling emergence in sand + soil. The use of solutions containing antioxidants in degumming of coffee seeds did not affect their physiological quality. Coffee seed soaking in ascorbic acid and EDTA solutions after drying contributed to the improvement of seed performance soon after harvest and after 4 months of storage. Application of the lemon solution injured the membrane systems of the seed cells.