This study aimed to evaluate the physicochemical and microbiological quality of minimally processed yacon added of conservative solution (citric acid 0.5%, oxalic acid 1.0% and calcium lactate 0.25%) and packaged in modified atmosphere (AMP) and vacuum. Physicochemical analyzes (pH, acidity, °Brix and color) at 0, 48, 96 and 120 hours of storage at 5 °C, and microbiological (aerobic mesophilic and coliforms at 45 °C) at 0 and 120 hours storage at 5 °C were carried out. The control consisted of yacons immersed in water. It was found that the pH control stored in AMP ranged from 6.15 to 6.28, and the vacuum from 6.22 to 6.32. The pH of the product added to the conservative solution was lower in both packages (p<0.05) and the acidity varied along the time. The control °Brix remained constant in both atmospheres, however, in the product added to the conservative solution and stored in AMP we observed increasing values. The yacons added by conservative solution showed higher L* and b*. The product added by conservative solution presented mesophilic aerobic count of approximately 1.0 log CFU.g⁻¹ for both atmospheres, while counting of the control treatment was more than 4.0 log CFU.g⁻¹ in both times. Coliforms at 45 °C values were <3.0 MPN/g at zero and after 120 hours of processing for both treatments in both atmospheres. Although the conservative solution cause changes in the physicochemical characteristics, it promoted the maintenance of postharvest quality of yacons, especially with color and aerobic mesophilic count.

Key-words: Vegetable, processing, conservation, postharvest quality.