

Evaluation of Performance and Suggestions for Improvement in Obtaining *Prosopis alba* Griseb Flour in a Region of Semi-Arid Argentine Chaco

Medina, Cristian

Gomez, Mirian

This study was conducted in the town Quebracho, dominant ethnic population Wichí who ancestrally used the fruits of *Prosopis alba* (algarrobo blanco) to produce flour for home consumption. The goals were to describe the steps taken to obtain flour, improve the critical points for a final product suitable for merchandising, determine fruit production by bole diameter class, and quantify the performance of the fruit in flour. Referents of Wichí families were surveyed, results showed that the crop is taken on the fruit of the soil, the drying is performed by exposing the fruit to direct sunlight and the grinding is performed on a leather. The critical points were identified: harvesting, drying and grinding. To improve yield mesh partial shade below the tree canopy in natural stands of algarrobo was used; the trees produce more fruit were of higher diameter class (> 41 cm), fruits of three trees are needed to produce 100 kg of flour, was the most effective drying which took two days at 54° C (less pollution and time), the performance of fruits was 50 % to produce flour, and the total milling time was optimized in 36 minutes to grind 13,750 kg of fruits with a motorized hammer mill, modified to improve its performance. We conclude that the results serve to initiate local microenterprises.