O-43 (221) ANTIOXIDANTS AND PHENOLIC CONTENT IN FLOWERS AND FRUITS OF FEIJOA (ACCA SELLOWIANA BERG.) IN A TROPICAL HIGHLAND

Dr. Juan Guillermo Cruz-Castillo, Apartado 65, Huatusco, Veracruz, 94100, Mexico; jcruzcastillo@yahoo.com (Presenting author)

In a tropical highland (2000 m) in Mexico total phenols and antioxidant capacity of fruits of feijoa in postharvest at 4, 12 and 25 °C were determined. Total phenols and antioxidant capacity of stamens and petals of the flower of feijoa were also evaluated. The fruits and flowers were harvested from trees 8 years old propagated by seed. To obtain total phenols and antioxidant activity were used as solvents methanol-water solutions 50% and ethanol-water 50%. Total phenols were determined by the Folin Ciocalteu method using gallic acid as standard. Antioxidants were determined by the methods of DPPH (1, 1-Diphenyl-2 picryl-hydrazyl-) and ABTS (2,2'-azinobis- (3-ethylbenzothiazoline-6-sulfonic acid). The total phenolic content in the fruit fresh was between 110-256 mg EAG $100g^{-1}$ FM. The antioxidant activity of fruits stored at 4 °C for 24 days was 2.92 μ mol equiv Trolox g FW⁻¹. In the stamens of the flower total phenols were 134.4 mg EAG g^{-1} DW, and in the petals and 19.0 mg EAG g^{-1} DW. The DPPH radical scavenging activity was of 92.5% and 29.9%, in the stamens and petals, respectively.

<u>Keywords</u>: nutraceutical properties of flowers, antioxidants in stamens of flowers, new foods, phenols in petals