Relación entre la composición química nutricional y las características morfológicas de los granos de girasol (*Helianthus annuus L.*) confitero

Relationship between the chemical composition and the morphological characteristics of the sunflower seeds (*Helianthus annuus L.*) confectionery

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The chemical composition, main morphometric properties, and nutritional value of seed of H. annuus from new confectionery genotypes of INTA, Argentina were studied. The results indicated that seeds contained 7.51% moisture, 50.33% fat, 28.10% protein, 9.53% carbohydrates, and 4.85% ash. Potassium was the predominant mineral, followed by magnesium and calcium. The essential amino acids were within 20 to 43 % of the estimated amino acid daily requirements of FAO/WHO/UNU. Fatty acid composition showed that linoleic acid was the major fatty acid, followed by oleic, palmitic, and stearic acids, but these fatty acid concentrations were not greater than in commercial cultivar (Grizzly), except palmitic. Morphometric properties of the in-shell seed (achenes) were weight 0.11 g, length 15.25 mm, and width 8.50 mm; most seeds showed calibers greater than 9.5 mm; unshelled seed weight was 0.06 g. lodine index was similar to the commercial cultivar (129.36%) and O/L ranged between 0.46 to 1.13. Total amount of fiber and sugars, was 3.86% and 6.76% of seed, respectively. Grain yields reached 1700 kg.ha<sup>-1</sup>. The new Argentinean germplasm of H. annuus overcome properties of commercial confectionery seed and constitute a good resource for nutritional and industrial applications.