New sources of oilseeds from Latin American native fruits

Masson, Lilia

Camilo, Conrado

Gonzalez, Katherine

Caceres, Andrea

Jorge, Neuza

Torija, Esperanza M.

Three Latin American oilseeds obtained from native fruits: nopal (tuna) (Opuntia ficus-indica), cherimoya (chirimoya) (Annona cherimola), and papaya, Chilean variety (Carica pubescens or C. candamarcensis) were studied for their fatty acid composition and bioactive compounds, such as tocols and phytosterols, looking for new sources of special oilseeds for this region. The results indicated that each species represents an interesting possibility. Nopal oilseed is a good source of linoleic acid (62%), with a good balance between SFA and MUFA (1:1.3). Cherimoya oilseed presents quite a different composition, with 24% SFA, 43% MUFA and 33% PUFA. Palmitic and stearic acids (15% and 7.6%, respectively) are the main SFA. A good balance between oleic acid (42.7%) and linoleic acid (31%) was observed. Papaya oilseed is a highly MUFA oil (72% with 71% oleic acid), with a very interesting composition, according to the new nutritional and technological recommendations. With respect to bioactive co