Study of suitable sunflower varieties for pectin production and determining its quality

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Pectin is a very precious material, which has a great role in food and industries because of its ability to produce gel. One of the materials for production of pectin is sunflower head residue, that is a potential natural source of low methoxyl pectin. However, an advance cultivars of Golestan province consist of, Golshid, Recorde, Gabor, Azargol and Progress have been selected. Pectin was extracted by using 0.75% sodium hexameta phosphate at pH=5 and temperature 85°C for 20 minutes and then, extraction yield, galacturonic acid and the degree of esterification were evaluated. The results showed that, Golshid and Recorde varieties had the highest yields than the others and their galacturonic acid content were 80.4 and 81.8% extracted pectin was low methoxyl type and esterification degree of pectin varied from 33.2 to 35.1% there was not any significant difference between varieties. Gabor variety had second extraction yield whereas Azargol and Progress had (2.3 and 1.8%) the lowest pectin yield.

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