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## Determination of some technological characteristics of local popcorn genotypes in the black sea region of turkey

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Maize is one of the important cereals grown in the world. Popcorn (*Zea Mays Everta Sturt.*) industry has been increasing continuously throughout the world. Development of microwave technology for popping corn has increased popcorn production. Although corn (*Zea mays L.*) is principally cultivated for carbohydrate production, in the past several years, it has gained great significance as a source of vegetable oil for the food industry. Corn kernel oil is mainly used for salad and cooking oil and for the production of table margarin. Its fatty acid composition comprises 40-68% of linoleic acid, 20-32% of oleic acid, and 8-14% saturated fatty acids, mainly palmitic acid. Determination for Fatty Acid Composition; The fatty acid composition of seed oils was determined by Gas-Liquid Chromatography (GLC) of fatty acid methyl esters after Thies. About 20  $\mu$ L of extracted oil were transmethylated for 20 min at 20 °C with 1 mL of a 0.5 M solution of sodium methylate in methanol. Then, 0.5 mL of isooctane and 0.2 mL of 5% (wt/v) of NaHSO<sub>4</sub> in water were added in that order. The samples were centrifuged, and 2.5  $\mu$ L of the upper phase was injected into the gas chromatograph at a split ratio of 1:70. Analyses were performed on a Perkin-Elmer gas chromatograph. In this Study, 48 popcorn genotypes were used. 10 technological characteristics of 48 local popcorn genotypes were examined. Local popcorn genotypes were collected from 10 cities in the Black Sea Region of Turkey. Variance analysis showed that there were high variations in most of the technological characteristics. Crude fiber content, dry matter content, oil ratio, protein ratio, starch ratio, palmitic acid ratio, stearic acid ratio, oleic acid ratio, linoleic acid ratio and linoleic acid ratio between 1.51-3.59%, 87.20-89.99%, 2.22-5.95%, 10.69-16.42%, 63.00-73.64%, 9.61-15.93%, 1.25-3.62%, 24.43-42.14%, 40.39-59.53% and 0.0005-1.21% respectively. It was concluded that local popcorn genotypes collected from the Black Sea Region could form a rich genetic base in improvement programmes.

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## Ornithogalum species consumed as medicinal plant

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Turkey is the gene center of many plant species. There are some documents about studies on the preservation, sustainability and evaluation of plants found in natural flora. The most of plants are collected uncontrollably from nature. They consume fresh, dried or different methods. Some of them are Ornithogalum species known as Turkish name "Çiğdem, Tükürkötü, Sakarcan". Ornithogalum, a member of the family Hyacinthaceae, contains around 150 species. Geofit is a plant. There are 44 species in Turkey, 17 of which are endemic. It grows with onions and seeds. The plant grow up well in barnyard area, not process soil and hazelnut fields. White flowering bulbs are collected from the mid of February until the end of April from nature. These onions can be consumed as fresh, boiled, roasted, pickled and preserves. The onions contain saponin. It is used as digestive system activator, constipation reliever, diabet and cholesterol control. The gathering of the plant with its bulbs in the flowering period prevents both the onions and the seeds from being transferred to the next generation. This situation will be caused to disappear of ornithogalum species from nature. In this research, the growing areas of Ornithogalum species collected from nature in Turkey, consumption forms as medicinal plant or vegetables and their consumption purposes were mentioned. In addition, with the survey conducted, lost amount by collecting from the nature was determined during the last 10 years.

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