

Sunflower Seed Production and Processing in Romania

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Abstract

The sunflower crop has an important place in world agriculture due to many advantages; the capacity for high seed yield and good oil content. Sunflower kernels are used in industry for obtaining healthy oil for human consumption, as well as the secondary use in animal feed. Since the first sunflower hybrids were developed with high oil content, cultivated sunflower production has increased all over the world, including Romania. There have been sunflower hybrids developed with low oil content and high protein content that are used as confectionery sunflower. Romania has the largest area of cultivated sunflower in the EU. Each year it cultivates around 1 million hectares. Also, Romania has the highest sunflower seed production in EU. In 2017 on 1.010 million hectares it produced 3.16 million tones. Unfortunately, 60% of the seed goes to export, and only 40% is processed in the country. Romania also exports sunflower oil, exporting 2.7 times more oil than importing. There are many oil factories producing very high quality oil with good color, good smell, high nutritive value (90% unsaturated fatty acids), high stability, and high capacity for a long period of use. The oil factories have different processing capacities from 150 to 2,200 tones/day. In recent years there have been factories developed for producing sunflower crude oil by using a cold pressing method. Many of these are small family factories, but they are producing very healthy and high quality oil (many receiving Awards at some International Exhibitions). In Romania, confection hybrids are produced, but not enough to meet the consumption demand. People know the benefits of sunflower seeds referring to therapeutic and nutritive value (many vitamins and minerals), and as a valuable source of quality protein. There are many small factories for dehulling and for packing sunflower seeds. Much of the confectionery type sunflower seed is imported from Bulgaria, Turkey or Spain.

Key words: sunflower, seed production, market, processing

罗马尼亚葵花籽的生产和加工

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摘要

由于具有籽粒产量高、含油量高等多种优良性状，向日葵在世界农业中具有很重要的地位。葵花籽在工业上被用来作为供人类使用的食用油，还被用作动物饲料。自从第一个具有高油向日葵杂交种被培育成功，向日葵在世界上的种植面积显著增加，罗马尼亚就是其中之一。此外，育种家还培育出含油量低且蛋白质含量高的向日葵杂交种，被用作食用向日葵。

罗马尼亚是欧洲向日葵种植面积最大的国家。全国每年种植面积在 100 万公顷左右。罗马尼亚的葵花籽产量也在欧洲占比例最高。2017 年，罗马尼亚全国种植了 101 万公顷向日葵，葵花籽产量达 316 万吨。遗憾的是，收获的葵花籽中，60%用于出口，仅有 40%留在国内进行加工。罗马尼亚也出口葵花油，使得每年的食用油出口量比进口高出 2.7 倍。

罗马尼亚有很多工厂生产高品质的葵花籽油，它们具有以下优点：色泽好、味道好、营养价值高（含 90%不饱和脂肪酸）、稳定性好、及储存时间长。不同工厂对油的加工能力不同，每天的加工量在 150-2200 吨之间。

过去几年，我国涌现出多家通过低温压榨生产葵花籽原油的工厂。这些工厂中，虽然许多属于家族企业，但是能生产非常健康和高质量的食用油（它们在国际展览会上已获得很多奖项）。

罗马尼亚也种植食用向日葵杂交种，但是不能满足消费。人们已经了解了葵花籽有益健康和具有较高的营养价值的好处（如富含维生素和矿物质），并且是高质量蛋白质的有益来源。罗马尼亚国内分布有多家规模较小的葵花籽去壳和包装的工厂。然而，多数食用型葵花籽还需要从保加利亚、土耳其和西班牙进口。

关键词：向日葵，种子生产，市场，加工