

Report of the Development of the Sunflower Industry in China

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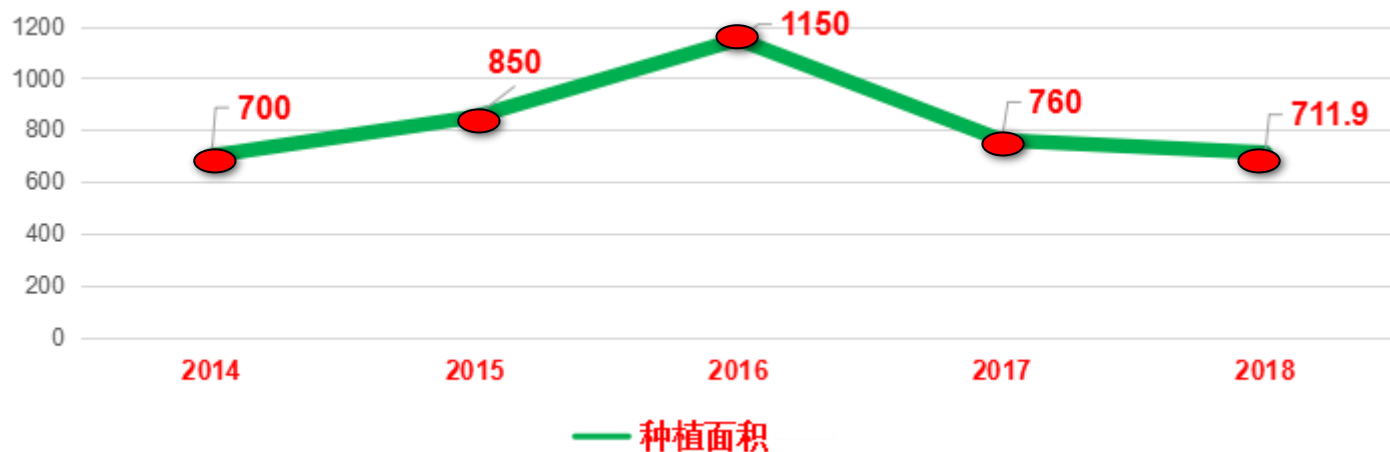
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(I) Summary of development of the sunflower confectionery industry

First, annual average planted area of the domestic confectionery sunflower has been maintained between 1.32 to 1.65 million acres, the largest confection sunflower production in the world.

Planted Area of the Domestic Confectionery Sunflower 单位：万亩



Second, the seed business of the confectionery sunflower in China has an annual value of **1 billion Yuan**, while the farmers' seed production is valued at **10 billion Yuan**, and the consumed roasted sunflower seed has a value of **40 billion Yuan**, making China the largest consumer in the world in this section.



Third, the export volume of confectionery sunflower showing an upward yearly trend, making China the largest confectionery sunflower exporting nation in the world.



Fourth, the representative Chinese confectionery sunflower hybrids, **SH361**, **SH363** and **Sunrise No.3** possess the top-ranking technological standards and economic value in the world.



Fifth, population working on confection sunflower production and related business has reached **one million**, making China the country with the largest employee of people working in the sunflower business.



The confectionery sunflower of China ranks No.1 in five areas, including **planted area, consumption, exporting, scientific research standards**, and **the number of employees**. China has rapidly become the center of worldwide attention for its confection sunflower industry.

(II) Confectionery sunflower planting and general production in China in 2016 and 2017

Planted area of confectionery sunflower was about **1.89 million acres**, total production of confectionery sunflower were **2.0 million tons** and sunflower seed exports in China were **0.30 million tons** in 2016.

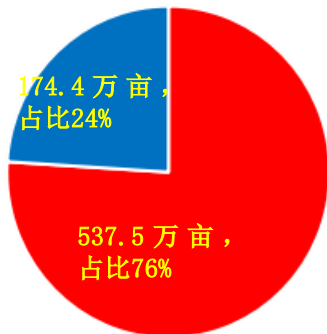
Planted area of confectionery sunflower was about **1.25 million acres**, total production of confectionery sunflower were **1.5 million tons** and sunflower seed exports in China were **0.40 million tons** in 2017

(III) Cultivation and production of Chinese confectionery sunflower in 2018

1. Planted area and variety utilization

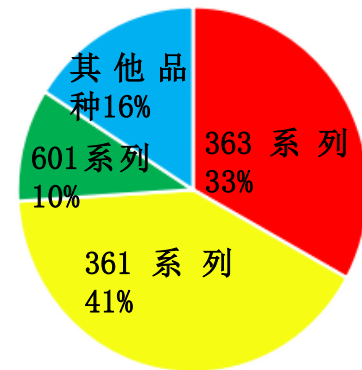
In 2018, the confectionery sunflower planted area is projected to be about 1.17 million acres, mainly distributed in Inner Mongolia, Xinjiang, Gansu as well as provinces in northeast China. Inner Mongolia is still the largest confectionery sunflower production area of China with 0.89 million acres. Varieties planted were still primarily SH363, SH361 and 601 series.

2018 年
全国食
葵种植
面积比
例



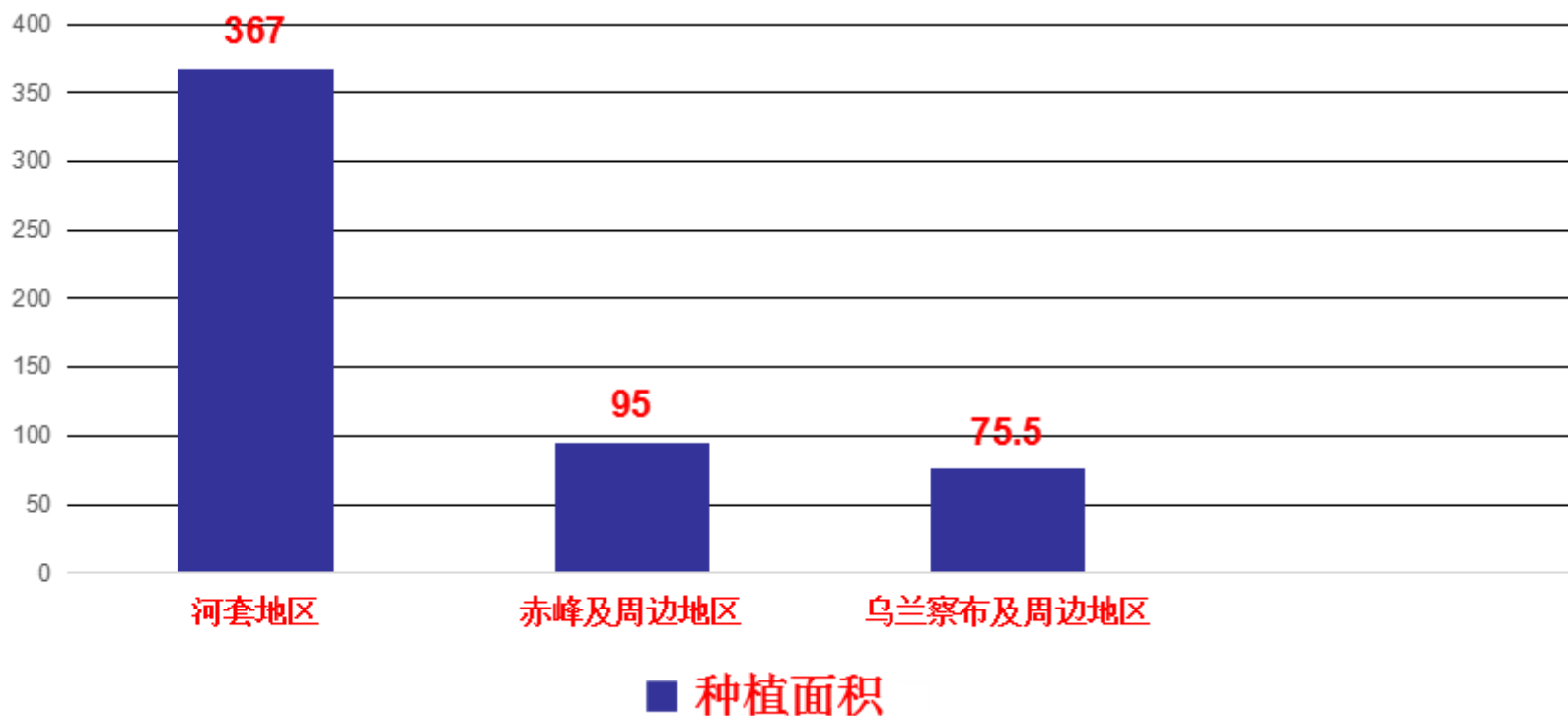
■ 内蒙古 ■ 其它地区

2018 年
全国食
葵品种
使用情
况

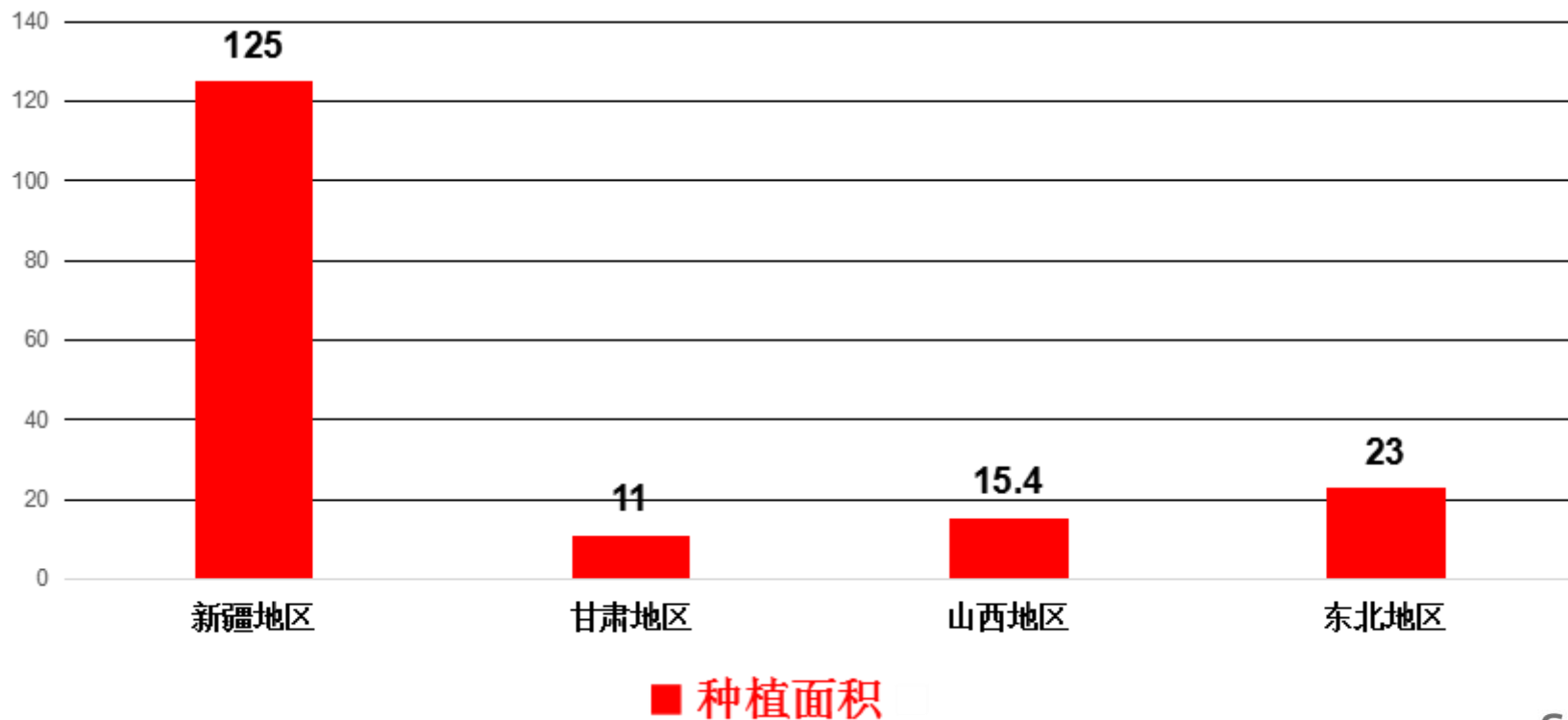


■ 361 系列 ■ 363 系列 ■ 601 系列 ■ 其它品种

The Planted Areas of Inner Mongolia 单位：万亩



The Planted Areas of Other Regions 单位：万亩



2.Prediction of Quality and Price:

Due to dry weather at the **early growth stage** of sunflowers, in 2018, pathogen infection, pest incursion, and weed invasion occurred earlier than those in the year of 2017. A number of disease and pests such as **leaf spot and moths** occurred in particular areas. **Broomrape** were discovered as early as the time when plants were **30cm** height.

Climate condition at the **medium development stage** was favorable, making promising prospect for yield and seed quality at the later development stage. Facilitated by the promotion of new varieties and optimized cultivation techniques, average yield will remain stable to a certain extent, while higher quality of commodity is expected. The high-end quality seed is mainly from areas like **Chifeng of Inner Mongolia** and **Altay of Xinjiang**.

Prediction of Price of Confectionary Sunflower in 2018

Variety	Price (Yuan/kilo)
common seed of variety SH363	7—8
high-end seed of variety SH363	11—13
common seed of variety SH361	6—7
high-end seed of variety SH361	8
601series	7—8

3. Export trade :

In 2018, the production of confectionery sunflower is expected to be up to **1.36 million tons**, with about **30%**, or about **0.40 million tons** exported to the Middle East and Europe.



(IV) Issues and suggestions for the sunflower seed industry

Firstly, with the lack of rotation, sunflower production and quality shows the trend of deterioration, affecting growers' incomes seriously.

Secondly, over recent years, broomrape tends to spread quickly, which has caused loss of capability to growing sunflowers for nearly **0.17 million acres**, and resulted in production loss of **0.2 million tons**.

Third, *Sclerotinia* affected the land of nearly **0.17 million acres** with the loss of capability to growing sunflowers and resulted in production loss of **0.2 million tons**.

Fourth, a new disease named grain watermark strongly affects seed quality , the price reduced about **30%**, which is expected to be a main restrict for sustainable development of sunflower business.

Suggestions

1. Improve cultivation techniques and rotation practice.
2. Develop new varieties resistance to broomrape , such as Sunrise No.3.
3. Developing new varieties resistance to *Sclerotinia*, which is a worldwide problem and scientists are working hard all over the world.
4. Develop new strategy to further control the grain watermark via application of chemicals and development of new varieties.

THANKS!