

2022



CHINA STEVIA LEAVES SUPPLY AND DEMAND REPORT

WHITEBOOK

CATALOGUE

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Seed Cultivation Current Situation

Currently, the cultivation of stevia in China is mainly cuttage, along with some seed breedings. The average planting area for seed breedings these years is about 2,667 HA (40,000 Chinese mu) and 8,000 HA(120,000 Chinese mu)~10,667 HA (160,000 Chinese mu) for cuttage.



Effected by the low price of autumn stevia leaves, the orders in 2021 summer were in deficiency, leading to a low inventory of cuttage seeds over the winter.

During the spring of 2022, the labor for cuttage is not enough and the actual output of cuttage seeds is 1.15~1.2 billion plants, far below the demand of 1.6 billion plants. This led to the rising price of cuttage seeds. The price for each plant rose from the expected 0.06 yuan to 0.08~0.10 yuan.

This situation pushed the planting bases in Xinjiang, Gansu to use seeds instead of cuttage or give up planting. Some farmers in Xinjiang had to give up planting or change the planting projects. The cuttage plants bought by the planting base in Gansu are mostly of bad quality and the actual amount of arrivals does not match the amount being ordered. In addition, the number of plants in each bunch is also far less than the promised 100 plants, and some only has 80 plants.



SOLUTIONS AND SUGGESTIONS:

1

The stevia industry association should act as a bridge and organize the cultivation as well as producing of cuttage plants. Meanwhile, the association should help the downstream manufacturers establish cooperation with the stevia producers to set a usage plan at least a year in advance. In this case, the cuttage plant producers can start preparation

2

The seed producers should pay more efforts on technic developing to better handle the market volatility. Since the steviol content in cuttage is raising, cultivating of quality seeds is also available. In some cases, the quality of seeds can match cuttage plants very well.



Planting Current Situation

Planting Area:

The actual stevia planting area in 2022 was about 11,000 HA(165,000 Chinese mu)~11,333 HA(170,000 Chinese mu), which was 667HA~1,333 HA less than that of 2021. Meanwhile, the average number of each HA of stevia was also 5% less than the past years.

The planting bases of stevia are undergoing difficulties:

1. The rent is high. Under the influence of the rising price of stevia dry leaves at late 2021, the land rent in Xinjiang and other planting areas increased significantly.

2. Cuttage plant transportation and transplanting costs rose. At the beginning stage of stevia planting of 2022, the transportation and transplanting costs of stevia plants were restricted by the government pandemic control. The related costs are significantly higher than that of

The average output of each Chinese mu (about 0.07 HA) in 2022 is around 400kg, far below that of the past years' 450-500kg.

3. Costs of energy and fertilizer rise. Prices of nitrogen fertilizer, potash fertilizer, and phosphatic fertilizer were lifted due to the short of supply and the increasing energy prices brought by conflicts between Russia and Ukraine. Stevia needs a large amount of fertilizer during growing and the average cost for each HA of stevia is 100~300 yuan higher than that of the past years.

4. Growing of stevia effected by climatic anomaly. Since the temperature of early 2022 was high at the stevia planting bases in Xinjiang, Gansu, and Dongtai, the growing of seedlings was not good enough. The growing stage between July and August is quite critical and some also harvest during this period. However, the pandemic control in Xinjiang and Gansu upgraded at that time and thus the management was not quite enough. After September, the temperature in Xinjiang and Gansu dropped rapidly. In October, the temperature kept on dropping and it also snowed, which left a big challenge for later growing stage and harvesting.



SOLUTIONS AND SUGGESTIONS:

1. The stevia association should act as a bridge to promote the production. The association should help the stevia producing companies and end users to establish close cooperation and provide the financial support for stevia cooperatives. Therefore, the stevia planting area and stevia price can be stable.

2. The stevia producers should pay more efforts on technic developing and do research on sustainable utilization of stevia planting fields, stevia habitat adaptability, plant protection. This can help lower the risks during planting, fertilizing, and growing seedlings, promoting the stable output of stevia leaves. In this case the enthusiasm of farmers can be guaranteed and the price of stevia will be stable.

Developing Trend

Xinghua GL established cooperations with scientific research institutions, agriculture experts, and cooperatives to establish a professional data base of stevia varieties, climate, edaphic condition and planting procedures. Xinghua GL Stevia helped cultivate higher quality of stevia GL#9 and GL#10, improving the characteristics of plants and sustainably supply 100% USDA NOP organic stevia products. This help enhance the confidence of international consumers on China's sustainable supply of stevia raw materials as well as the sustainable development of China's stevia

Whole-process mechanized operation system building:

1. Mechanized seedling

Currently the planting and transplanting of seedlings needs a lot of labors. The planting of stevia in Xinjiang occupied the labors for other commercial crops and the mechanization of seedling is quite urgent.

Once the mechanized operation was achieved, the costs of planting stevia will decrease significantly and the farmers can become more enthusiastic about planting. Therefore the price and supply of stevia leaves can be stable.

2. Mechanized harvesting

Although currently we have simple cutting and lay down machines, labors are also needed for palletizing. It is important to design a machine that combines cutting and palletizing. The harvested plants can be piled up at one place and let them dry naturally.

3. Mechanized defoliation & packing

The defoliator we have right now requires a lot of hand operations. It is suggested that a machine that combines defoliating and packing should be designed. People put the dry stevia leaves pile in the machine and then get the defoliated and packed final products.

Xinghua GL Stevia

Since GL started planting stevia in Xinjiang, we accumulated some practical technical solutions. We suggest that the stevia association should take the lead and help GL Stevia establish cooperation with agricultural machinery developing companies to promote the whole-process mechanization covering planting and harvesting. This can help China's stevia industry form an intellectual property system that can share information between association members, thus improving the stevia planting efficiency.



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