

2015 Nutraceutical Garlic Crop Update

Introduction

The Chinese garlic crop to be harvested in 2015 is in the ground and it appears to be an average crop. The initial harvest of medium 2000 to 5000 allicin and organic will begin in May 2015 and finish about the middle of August.

The Hi Allicin garlic harvest will begin in September and finish in late November.

All of the other growing areas are committed to fresh market and serving the internal demand for spice packers or retail containers.

Raw Material and Source

Garlic is a day length crop. It requires different amounts of daylight hours to grow and mature. It can grow at different latitudes and longitudes.

Typically garlic is planted in the Fall during the months of August, September and October - depending on the region in which it is grown. Harvesting occurs May through October - cultivation varies by region.

The largest producer of garlic is China, however, garlic also grows in Spain, USA, India, Peru, Argentina, Mexico, Europe and the Middle East. In the US approx. 50% of the production goes to dehydration for spice packers and 50% to the fresh retail market. There is a definite flavor difference between US White Garlic and the Chinese and other stick garlic types. There is no Nutraceutical garlic produced in the US or other markets. Nutraceutical garlic production has all moved to China. It can be activated in other markets with a 2 year program and commitment.

There are many different growing regions in China and other regions. It is a day length crop. The conditions in which the garlic grows in are long, warm, sunny and dry days. China's harvesting begins in mid to late May. Currently, harvest conditions are good - there is no rain, frost or other weather related conditions that can delay, stunt or cause defects.

Garlic, which is a root crop, is harvested from the ground by using a digger or is hand pulled from the soil. The garlic is then topped by hand and allowed to air dry for approximately two weeks.

Currently Nutra Products, Inc. purchases garlic from China and the USA. We are also developing growers in India and other locations.

We have been working with these regions for several years. Almost 99% of the commercial crop in these areas are exported to Europe or the USA.

We are working on a 2015 China, Mexico and Spain crop for dehydration.

Organic garlic is currently available from China, Spain and the USA. We are sourcing organic garlic from China through certified organic growers and dehydrators.

We can trace our garlic, organic or otherwise, from grower to finished product.

Processing

Our manufacturing process consists of beginning with raw garlic that is cracked into cloves, peeled, washed, sliced and dried, with a proprietary process. It is initially in flake form and then milled into granules or powder for further processing utilizing fluid Bed Agglomeration for uniformity. This is a proprietary process by NPI. It is essential to keep the alliinase enzyme active to insure all of the health benefits are delivered in a finished product.

The raw garlic itself is harvested and processed into dehydrated forms over a 3-4 month period starting mid to late May through October. The granulation of the garlic powder can be continuous.

Manufacturing takes place over a 3-4 month period. Some raw garlic is cold stored and processed later to extend the season. Crop planning cycles and processing is a minimum of 12 months and most often a 24 month activity. Adjustments are made based on yields, recovery and energy, weather and labor costs. Lead time for finished granulation is days against an annual contract where we will keep 2 months of floor stock based on historical purchases.

Productions Costs as % of Total

- | | |
|--------------------------------|--------------|
| • Raw Organic Material (Crop) | 62% |
| • Processing | 38% Approx. |
| • Quality Control & Testing | Included |
| • Packing | Included |
| • Duty (when imported to US) | 34% |
| • Freight & Forwarding Storage | 1.4% Approx. |
| • Other (e.g. duty, tax, etc.) | N/A |

Supply

This unique Nutraceutical garlic has been selected for color, solids, alliinase content, and alliin yield. The finished product has to be selected for micro, Alliin, color, specks/defect compressibility and must meet <50 TPC as Nutraceutical garlic. (Garlic selected for spice or flavor applications is different and does not deliver the full marker compounds found in fresh garlic. All of the compounds for Health can be measured by HPLC)

Current crop yields are projected to meet 85% of the global demand for Nutraceutical /Chinese garlic.

Global supply is not expected to grow in supply unless Spain, India or Mexico enters the market as a major supplier. China has taken away subsidies for Garlic and is now subsidizing other crops, such as corn and grain, to increase their food supply. Less garlic is being planted as a result.

Nutraceutical garlic is a specialty product. To our knowledge, there are no suppliers of Nutraceutical garlic who can generate a 100 % of global supply.

We are positioned to meet customers' contracts and forecasting forward for 2 years.

We do not own our own farms. All material is contracted with manufacturers and their farmers.

China is coming off of a 2 year normal crop after 2 years of shortage due to abnormal demand for the consumption of raw garlic and two years of weather related issues. The global demand appears to be in balance for supply of Chinese garlic for flavor and dietary supplement use.

We do not know how much garlic is actually harvested - China and other countries do not publish this data.

China has an expanding middle class, and the consumption of these empowered buyers for fresh garlic has increased the cost and demand which has resulted in higher costs of the processing of raw garlic for several years.

There are trends in the labor markets in growing regions that will affect supply and the cost of growing, but this data is not available. Fewer people in China are being employed in agriculture. They do have automated harvesting, but it is not harvested at a fast enough rate to lower costs and ensure a consistent labor supply.

Demand and Market

There are major food companies that have a consistent and growing demand for garlic as a seasoning in their consumer products. There are more ready to eat meals being marketed and this has increased the demand for a natural seasoning vegetable, such as garlic.

We do not have a measureable significant global demand. The whole Nutraceutical industry use of garlic as a supplement is barely measureable on a global basis. It is only the strict specifications and higher profits to the growers and manufacturers that allows for the continued production.

In short production years, the raw material supply and cost goes up substantially even with contracts. Free market demand can cause the cost of processing garlic to increase. Short markets have doubled or tripled the cost of raw materials.

We gathered our information from various industry sources such as ASTA, IFT, Trade organizations and the market prices to customers.

What You Can Do

In order for us to better serve your garlic needs, we would request that you consider a 2 year forecast/commitment of volume so that we may secure and process the material at a reasonable price. The price may be fixed for the 2 years, however, if your company shops the market for Nutraceutical garlic, we will not be bound to the initial fixed price.

Final Thoughts/Conclusion

Nutra Products has developed a process and product patent for Garlic that activates like fresh garlic in the stomach - Garli-eze®. It delivers all of the actives with no enteric coating and no unpleasant side effects. It is patented and clinically tested.

Garli-eze® garlic performs like all of the historical clinical trials for health benefits of garlic when garlic was consumed fresh.