SAFFRON PRODUCTION CYCLE

The timing of the saffron production cycle varies depending on climate, but the basic cycle described below is the same everywhere. **It is important to know this cycle to maximize on crop yield.**

- **Vegetative stage** (Dec. – Mar.):
  - Corm development
  - Saffron leaves remain green and continue to grow over the winter and spring. This is when the secondary corms develop.

- **Flowering, harvesting, drying** (Oct.-Nov.):
  - The mother corm is at the base of a cluster of secondary corms.

- **Sprouting** (Sept.):
  - Leaves turn brown when corns go dormant in late spring. The mother corm dies, leaving a cluster of secondary corms.

- **Planting** (Aug. – Sept.):
  - Saffron beds remain in place for 4-6 years, increasing in yield annually.

- **Dormancy** (July – Aug.):
  - DO NOT DIG UP THE MOTHER CORM WHEN FLOWERING IS OVER!

- **Corm development** (Apr. – June):
**Production Considerations**

In West and Central Asia and the Mediterranean region, saffron is grown in the field, often in areas with low soil fertility and limited rainfall. The Pennsylvania Dutch brought it to the US over 280 years ago, and have grown it in small quantities mostly for personal use ever since.

When the UVM scientists started their research, they assumed saffron might not survive the cold Vermont winters, so they began by growing it in containers in high tunnels. Their saffron yields and quality were high. Since then they have also grown saffron outside in the field, and so far it appears that they can survive the cold soil temperatures that occur in USDA cold hardiness zone 4. There are many questions remaining about how best to grow saffron, but the results so far are promising.

The high cost of saffron is attributed to the labor demands required for harvesting and processing the crop by hand. Indeed, it is a time consuming task, but the good news is harvest takes place for only a few weeks in October or November, when much of the demands of the growing season is over. Most of the year, saffron requires no attention, except to keep the beds weeded and to protect the corms from rodents and small mammals. Work is also underway to develop methods for mechanizing the harvesting process.

**Who Wants to Grow Saffron?**

We have heard from a diverse group of potential saffron farmers. Some are vegetable growers and nursery operators who recognize saffron as a high-value crop that could expand their revenues. Others are future farmers who are retiring soon and hope saffron will provide supplemental income while keeping their land in agricultural operation. Still others are dairy farmers who seek alternative crops to augment their farm revenues. Farmers with solar arrays are also trying it out.

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**How can I Sell my Saffron?**

North American grown saffron currently sells for $25-100/gram. The US imports 46 tons/year, and is projected to triple by 2025. Currently the saffron market is focused on its culinary uses. Educating the public and gourmet chefs of the merits of purchasing local saffron is needed. Given the growth of the herbal supplement market, the opportunities for selling saffron as a medicinal product may over time exceed other uses.

There is much work to do to develop a market for local saffron. However, inventive producers are already creating value-added products to increase their revenues. As more local saffron becomes available for sale, market opportunities will follow.

**Our Goal:**

Develop the potential of saffron as a high value specialty crop to increase revenues of small diversified farms.

**Want to learn more about saffron?**

Visit our website at [https://www.uvm.edu/~saffron/](https://www.uvm.edu/~saffron/)

Or join Saffronnet,

This is our listserv focused on saffron production with over 400 subscribers from across North America and beyond. To join email:

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**Produced by:**

The North American Center for Saffron Research and Development

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Saffron is the dried stigmas of a fall-blooming crocus (*Crocus sativus*). It is used as a culinary spice in Mediterranean dishes and a medicinal herb. It is the most expensive spice in the world, with a retail value of $3,000-9000/lb. In 2015, scientists at the University of Vermont (UVM) began studies to determine its suitability as a specialty crop for small diversified farmers in the US. They found it survives cold Vermont winters and yield and quality of their crop compares with or exceeds saffron from traditional production areas, such as Spain, Iran and Italy. Hundreds of growers across the US and Canada are now growing this crop with promising results.

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