

GROWERTALKS

Features

4/29/2016

Parsley, Sage, Rosemary & Thyme ... and More

Helen Margaret Griffiths



Producing herbs may be an excellent addition to an already existing flower business or mixed vegetable business, or could be a new startup stand-alone business. Even though competition may be intense, with expanding markets and interest in “buying local,” there are some wonderful opportunities for new herb producers. Making a profit with herbs is no different from any other plant business—you need to sell it before you grow it.

This article focuses on how to identify markets and setting up and running the business. Herbs, which include a large number of plant species, may be culinary or medicinal. Here, the focus will be on culinary herbs.

Pictured: Fresh-cut herbs for sale at Kingbird Farm's stand at the Ithaca Farmer's Market.

Annuals, perennials or a combination?

Most producers will be growing a combination of annuals and perennials to fill the needs of their markets. The most popular herbs for fresh-cut, according to Sandie Shores, author and owner of Herb's Herbs, are arugula, basil, chives, cilantro, dill, sweet marjoram, mint, oregano, parsley, rosemary, sage, sorrel, French tarragon and thyme.

Basil is consistently at the top, and in the Northeast, parsley is becoming increasingly popular. Without a greenhouse, unless you live in the southern part of the U.S. (Zone 7), you'll be restricted to selling annual herbs only in season. Perennials are fairly slow growing and take around six weeks to reach “cutting” stage after coming out of dormancy, which will result in a very limited market period for those in the northern parts of the country without greenhouse space.

Some of the best herbs to grow if selling transplants are basil (Genovese), lemon basil (e.g., Mrs. Burns) and possibly some of the colorful basil. Growing compact varieties and selling as a mix in a 6-pack is a good choice, too. According to Sandie, who has significant experience selling in Minnesota, perennials such as

Greek oregano, garlic chives, spearmint, thyme and lemon thyme usually sell well as potted plants. She doesn't recommend selling cilantro or dill in pots, as neither transplant well.

Greenhouse heated vs. unheated high tunnels or low tunnels

If investing in a heated greenhouse isn't an option, high tunnels, which are much more reasonably priced (although the foundation should be installed professionally), may fulfill the needs of the business. There are many different designs of both high tunnels and greenhouses, and good information is available online. Low tunnels are cheap and easy to construct. These are great for season extension and, in some zones with some herbs, can provide enough protection for over wintering. Sandie says that in Zone 5 she successfully grew the semi-hardy herbs cilantro and parsley in the spring and fall using low tunnels.

In Central New York State, Michael and Karma Glos, owners of Kingbird Farm in Berkshire (Zone 5), started growing herbs when they wanted medicinal herbs for their cattle. With high tunnels, they now successfully grow many culinary annual and perennial herbs, which they sell as fresh-cut, potted and dried.

Cultural conditions

As with vegetable and flower production, herb growers are faced with many different plants species, which results in some variation in growing requirements. Critical for all herbs is a growing medium that drains well. The majority of growers use a commercially available soilless mix. The correct soil chemistry, including pH, is important and soil tests of permanent beds in the greenhouse/high tunnels, as well as in the field, should be made yearly using a test that includes a micronutrient analysis. Hydroponic herb production, particularly basil, is common, but is usually a part of a facility that focuses on hydroponic production.

Seeds, plants and cuttings

Purchasing high-quality seed is critical for all herbs, and for cilantro and basil, purchasing pathogen-tested and treated seed is important. A bacterial leaf spot (*Pseudomonas spp.*) epidemic in a cilantro planting is usually the result of infected seed. Fusarium is a seed-borne disease of basil, and downy mildew can also be seed-borne. Basil seed needs to be steam treated to eliminate the downy mildew pathogen and not all seed companies perform this treatment. Enza Zaden is one of the seed companies that provides this treatment for a number of different basil varieties. Starting with clean seed goes a long way to preventing crop loss.

With perennials, the initial liners should be purchased from a reliable source, as these will be the mother plants (foundation) for the perennial business. For those with a heated greenhouse, propagation from the mother plants can be made during the winter, thus allowing early sales of fresh-cut perennial herbs.

Kingbird Farm has shown that with high tunnels and living in Zone 5, in most years, they can get good results when they start propagation of perennials in early March.

To allow for continual production of fresh-cut annual herbs, producers will need to establish a seeding schedule for the individual herbs they're growing, which will be specific for their conditions and harvesting needs.

Nutrients, water, heat and light for production

Soil temperature (65 to 80F/18 to 26C depending upon the herb) is important for germination and can be

achieved by using heat mats. Many of the herbs have very small seeds, hence the flats should be gently and frequently watered after seeding for successful establishment. For producing fresh-cut herbs during the winter months, producers will need to provide supplemental lighting as soon as the seedlings emerge.

When growing cuttings, some producers wet the medium with fertilizer and use half-strength fertilizer for future watering. Alternatively, fertilizer is applied as soon as cuttings start to develop roots.

Fertilization is important and Sandie says that getting the right fertility level is a delicate balance with herbs. She grows both potted and for cuttings a little on the “hungry side.” “I feel that many herbs available today are so often over-fertilized to the point of flavor loss.” she said.

Limiting overhead irrigation can be important in reducing disease spread, particularly in the case of foliar diseases like bacterial leaf spot in cilantro.

Weed control

Herbs don’t compete well with weeds; they also may be hosts to insects and pathogens. Even though there are herbicides legal for use with herbs, producers in general choose not to use them. Hand weeding is usually too labor intensive. Many producers use organic mulches, landscape cloth and plastic mulches in their greenhouses or high tunnels.

Pest management

There’s significant potential for high insect and pathogen populations to arise in greenhouse/high tunnel-produced herbs. There are some botanicals, biologicals and various soaps and oils labeled for controlling insects and mites on herbs grown under these conditions, but they have varying degrees of efficacy and are normally expensive.

Prevention needs to be foremost in the mind of producers, as insects, even if they don’t kill plants, can cause sufficient damage to the foliage to make them unmarketable. Management practices that will be important are good sanitation, weed control, timely disposal of old plants, scouting regularly, removing infested plants and quarantining any new plants.

Controlling pathogens in herb production focuses on prevention and cultural approaches to management. Some pathogens (e.g., *Fusarium oxysporum*, downy mildews, rusts) are specific to certain herbs, but many (e.g., *Botrytis cinerea*, *Sclerotinia sclerotiorum*, *Pythium* species involved in root rot) attack all herbs. Soil-borne pathogens and nematodes can be a problem, often resulting in a reduction in herb growth. Kingbird Farm successfully controlled nematodes in a rosemary bed in their high tunnel using Nemat and Caliente 199, and mustard meal. The mustard meal is sold as an organic fertilizer (OMRI listed) and not as a biofumigant.

Using resistant varieties is a standard part of many disease-control programs. For herbs, it’s only recently that varieties have become available with some resistance to the more problematic diseases. In the case of downy mildew and basil, Eleonora has some of the best resistance in sweet basil.

(Significant work is underway with this disease and grower involvement is requested. Please see information on the following website: <http://vegetablemdonline.ppath.cornell.edu/NewsArticles/BasilDowny.html>)

Exciting new flat leaf parsley varieties—Fidelio and Peione, and arugula varieties Bellezia and Letizia, all have intermediate resistance to downy mildew.

Nufar, an Italian large-leafed basil; Aroma 2, a Genovese type; and Elidia, a new compact Genovese type all have some tolerance to *Fusarium oxysporum* and thus offer some protection from a disease with fungal spores that can survive in the soil for up to 12 years.

To reduce the incidence of soil-borne pathogens and maintain soil health, crop rotation is very important in the permanent beds in the high tunnels and greenhouses. **GT**

Additional information on growing herbs, diseases, and marketing can be found at:

“Growing & Selling Fresh-Cut Herbs” (second edition) by Sandie Shores. Ball Publishing

<https://sites.google.com/site/scnyagteam/southern-tier-produce>, February 2011 Brassica Cover Crops as Biofumigants

<http://plantclinic.cornell.edu/factsheets/basildiseases.pdf>

Helen Margaret Griffiths is a freelance writer in the Finger Lakes area of Central New York.