



ST. JOHNSWORT AS AN ALTERNATIVE CROP

HORTICULTURE TECHNICAL NOTE

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ATTRA is the national sustainable agriculture information center funded by the USDA's Rural Business -- Cooperative Service.

Abstract: *As an alternative crop, St. Johnswort poses significant production and marketing challenges to U.S. growers.*

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Overview

St. Johnswort (*Hypericum perforatum* L.) is utilized as a bulk raw material by the herbal products industry, where fresh flowers and flowering tips are manufactured into dried extract. It is not recommended as a tea or tincture herb.

Domestic demand has leveled off for retail products containing St. Johnswort. Such products ranked as the second highest sellers in both natural foods and mass markets in 1998. Although sales went up 500% in the summer of 1997, causing shortages of raw material, domestic production was not stimulated to a corresponding degree. A factor causing shortages in 1998 was the poor quality of South American *Hypericum*, due to effects of El Niño. Increased imports of raw material from other countries took up the slack, however, and the U.S. industry saw negligible price increases.

Demand for the herb rests on its reputation as an antidepressant (based on research done in Europe) and its possible use as a treatment for AIDS because of its antiviral effects (based on research done in Israel).

A hardy perennial herb or small shrub native to Europe, St. Johnswort and related species have become naturalized in Asia, Africa, Australia, and North America. In fact, *Hypericum* is

considered a serious weed problem for sheep ranchers in Australia and in parts of western North America. Eradication programs in California and Canada have resulted in introduction of the Klamathweed Beetle, which can eat *Hypericum* down to the ground. Before cultivating St. Johnswort as an agricultural crop (or importing seed), the prospective grower should check with the appropriate state department of agriculture regarding noxious weed status. Commercial growing of St. Johnswort has recently been banned by the Montana legislature. Seven other western states ban cultivation. Where it grows wild, *Hypericum* spreads by means of underground rhizomes and produces up to 100,000 seeds per plant. No species of *Hypericum* is considered endangered or threatened, or likely to become so.

Prospects for raising this herb profitably depend largely on being in the right position at the right time—for example, growers who had product to sell during the brief window of opportunity in 1998. Some small growers continue to produce this herb for local direct marketing or their own value-added products. It is sometimes added to nutraceutical beverages.

Two main sources of production information are *Herb of the Sun: Saint John's Wort* (1) by Richard A.

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(Richo) Cech and *Medicinal Herbs in the Garden, Field, and Marketplace* (2) by Lee Sturdivant and Tim Blakley. Cech's company, Horizon Herbs, also sells seed. The booklet provides details of propagation, plants per acre, pests, yields, harvest, storage, and shipping for commercial producers.

Sturdivant and Blakley provide further information on propagation, cultivation, harvesting of flowering tops, processing, and marketing.

Cech notes that germination is very uneven, taking from several days to several years and averaging 30% within three months. Plants must be started indoors after seed has been "cold

Seed Suppliers

Horizon Herbs
P.O. Box 69
Williams, OR 97544
(541) 846-6704
(541) 846-6233 FAX
e-mail: herbseed@chatlink.com
www.chatlink.com/~herbseed/
Send \$1.00 for 62-p. medicinal herb catalog.

Richters Herb Seeds
P.O. Box 26
Goodwood, Ontario
Canada L0C 1A0
(905) 640-6677
www.richters.com

Johnny's Selected Seeds
Foss Hill Road
Albion, ME 04910-9730
(207) 437-4301
(207) 437-4295 (commercial)
(800) 437-4290 (FAX)
e-mail: staff@johnnyseeds.com
www.johnnyseeds.com

Southern Exposure Seed Exchange
P.O. Box 460
Mineral, VA 23117
tel: (540) 894-9480 (orders)
fax: (540) 894-9481 (orders)
www.southernexposure.com
Will not ship St. Johnswort seed to CA, CO, ID, HI, MT, NV, OR, or WA. Send \$2.00 for catalog.

conditioned" (p. 10–11). Seeds require strong light to germinate. Commercial growers in France replace plants every two years.

Marketing

St. Johnswort has customarily been gathered from public and private lands in New England and the West Coast for marketing to a handful of dealers (3). Only three of the 25 tea and tincture companies surveyed by Lee Sturdivant and Tim Blakley in 1998 expressed interest in St. Johnswort (4). (Most of these companies were looking for the rarer types of native herbs.) Dealers have their established sources of supply and will buy from newcomers only in an emergency. Price depends on hypericin content, confirmed by analysis of a sample.

St. Johnswort is not well adapted to the types of products made by small home herb businesses. However, in *Herbal Renaissance* Steven Foster provides information on making St. Johnswort oil for external use (5). There is the possibility of "photo-dermatitis" in some fair-skinned persons who take the herb internally, Foster says. FDA has now implemented "Best Manufacturing Practices" for food supplements, which have impacted to a degree the small manufacturer of herbal products.

The American Herbal Products Association (AHPA) (6) can provide useful information on all aspects of the herbal products industry through its publications, biennial directory (manufacturers, growers, suppliers), memberships, e-mailed updates, and website. AHPA has sponsored symposiums on growing St. Johnswort.

See box for seed companies that supply St. Johnswort seed and plants. Several advertise strains with increased hypericin content. South American strains have, reportedly, tested out with a higher hypericin content than North American.

Growers interested in producing St. Johnswort should study the markets very carefully before committing to grow this crop.

References:

- 1) Cech, Richo. 1998. Herb of the Sun: Saint John's Wort. Horizon Herbs, Williams, OR 23 p.
Booklet is \$5.00 plus s/h. Credit card orders accepted. See box on previous page for Horizon Herbs contact information.
- 2) Sturdivant, Lee, and Tim Blakley. 1999. Medicinal Herbs in the Garden, Field & Marketplace. San Juan Naturals, Friday Harbor, Washington. 323 p.
*Order by mail, phone, fax, or internet from: San Juan Naturals
P.O. Box 642P
Friday Harbor, WA 98250
(800) 770-9070
(206) 378-2548 FAX
e-mail: naturals@bootstraps.com
www.bootstraps.com
Book is \$24.95 plus shipping. Includes production instructions for over 30 herbs in the medicinal trade.*
- 3) Upton, Roy (ed.). 1997. St. John's Wort (*Hypericum perforatum*): American Herbal Pharmacopoeia™ and Therapeutic Compendium. *Insert in HerbalGram No. 40. Summer. p. 7.*
- 4) The three were Motherlove Herbal Co., LaPorte, CO; Eclectic Institute, Inc., Sandy, OR; and Health 4 All Products Ltd., Barrie, Ont. See Sturdivant and Blakley, p. 300, 305, 313.
- 5) Foster, Steven. 1993. Herbal Renaissance: Growing, Using and Understanding Herbs in the Modern World. Revised edition of *Herbal Bounty* (1984). Gibbs Smith, Publisher, Peregrine Smith Books, Layton, UT. p. 174.
- 6) AHPA
8484 Georgia Ave., Ste. 370
Silver Spring, MD 20910
(301) 588-1171
(301) 588-1174 FAX
e-mail: ahpaa@ahpa.org
www.ahpa.org/

Resources:

- Adam, Katherine. 2000. ATTRA Trip Report: International Herb Association (IHA) meeting, July 18-21, Saskatoon, Saskatchewan. 25 p.
- Alternative Nature Herbal Newsletter staff. 1998. Focus: St. Johnswort. <<http://edge.net/~nature/>> January 12. 3 p.
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- Kowalchik, Claire and William H. Hylton (eds.) 1987. *Rodale's Illustrated Encyclopedia of Herbs.* Rodale Press, Emmaus, PA. p. 56-59.
- Stewart, Kim. 1997. Denver lab detects samples of fabricated St.-John's-Wort. *Natural Foods Merchandiser. November. p. 1, 14.*

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The electronic version of **St. Johnswort as an
Alternative Crop** is located at:
<http://www.attra.org/attra-pub/stjohns.html>

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