

Dahlia

Dahlia spp. (Asteraceae)

Fast Facts:

Acres in Washington : 75 Percent of U.S. Acreages: 20% Per Acre Value: Up to \$100,000 Value of Production in Washington: \$750,000
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Description of crop:

Dahlias are a tuberous perennial, sometimes an epiphyte, native to mountains from Mexico to Colombia. There are 30 species with 20,000 cultivars some producing large, show, chrysanthemum-like flower heads. Dahlias were originally introduced into cultivation for the tubers which were eaten as a vegetable. They are now commonly grown as garden ornamentals. Dahlias are stout rather woody plants in some cases reaching the stature of small trees; producing summer and fall blooming flowers in a wide range of colors and sizes. The great variety of dahlias results from their being octoploids (they have eight sets of homologous chromosomes, whereas most plants have only two). Dahlias are generally grown from tubers but can also be grown from seeds which can produce new varieties. Dahlias need a sunny location to thrive. Dahlias should be planted in an area that receives at least 8 hours of direct sunlight. An exception to this is in hot climates where they should receive morning sunlight and afternoon shade. Blooming dahlias are heavy feeders and should be given fertilizers with a high percentage of potassium and phosphorous such as 5-10-10, 10-20-20 or 0-20-20.

Dahlia is a high value ornamental crop grown in several parts of Washington State. Both the flower heads and the tubers are sold. It is grown by both large scale commercial operations as well as small scale growers. The largest grower in Washington is 10 acres. Other plantings range in size down to one quarter acre. The Washington State Dahlia Trial Garden is located in Tacoma, WA where dahlia varieties are evaluated on an annual basis. There is considerable trade of dahlia between the US and Europe, New Zealand, Australia and Japan.

Key pests:

Viruses that afflict dahlias are Dahlia mosaic virus, Tomato spotted wilt virus, Tobacco streak virus and Cucumber mosaic virus. The main fungi that harm dahlias are flower blight (*Botrytis cinerea*), Powdery mildew (*Erysiphe cichoracearum*, *Erysiphe communis*, *Erysiphe polygoni*) and vascular wilt (*Fusarium oxysporum*, *Verticillium albo-atrum*). Insects that affect dahlias are green and black aphid, leafhoppers, cucumber beetles, grasshoppers and nematodes.

Key pesticides:

Rose systemic products can be used. Virus control is achieved through screening and breeding programs. There is no cure for virus infection. The way to control viruses in dahlias is to avoid virus introduction and prevent secondary spread to other plants. Viruses can be spread through insect vectors, mechanical inoculation and through the seed. Roguing is also done to physically remove infected plants from the fields. Blight is controlled with Decree or 26GT fungicide. Powdery mildew is controlled with Eagle, Bayleton and Cygnus. Powdery mildew is also controlled through cultural practices which allow and encourage good air flow and ventilation of the fields. Powdery mildew is generally only a cosmetic problem affecting the leaves in the fall due to increased leaf surface and increased dew levels. Aphids are controlled with azadirachtin and the cucumber beetle with bifenthrin.

Critical pest control issues:

Control of leafhoppers, grasshoppers, aphids and cucumber beetles may become an increasing concern as better understanding of the role these pests play in vectoring viruses throughout the fields. Growers should choose virus-free dahlia tubers and plants. Remove or isolate infected plants. Labor is also a critical issue due to the fact that much of the work is done by hand.

Expert contacts:

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Kim Connell, grower
Connell's Dahlias
10616 Waller Rd. East
Tacoma, WA 98446

Sources:

The Columbia Electronic Encyclopedia
The Crystal Reference Encyclopedia
Dahlia websites
Correspondence with Hanu Pappu, January through March 2007

Personal conversation with Kim Connell, March 21, 2007

A partial list of registered growers in the region

Connell's Dahlias
10616 Waller Rd East
Tacoma, WA 98446
Tel: (253) 531 0292

Charles E (Gus) Cook
31215 Kent-Black Diamond Rd
Auburn, WA 98092
Tel: (253) 631 6642

The Bubar Family
PO Box 2971
Mount Vernon, WA 98273
(360) 445 4409

Richard & Danielle Parshall
20212 65th Ave. SE
Snohomish, WA 98296
(425) 486 6163

Ken Greenway
2905 S. Machias Rd.
Snohomish, WA 98290
(425) 334 7184 or
(888) 299 7184 toll free

Bill & Delores Schwinck
19857 Marine View Dr, SW
Normandy Park, WA 98166
(206) 824 6281

Teresa Bergman
100 Chapman Rd.
Castle Rock, WA 98611
(360) 274 8292

Cheri Corriel & Robin Hood
78 Ephrata Ave NW
Soap Lake WA 98851
(509) 246 1462

Jerry & Aimee Sherrill
13110 446th Ave SE
North Bend, WA. 98045
Tel: (425) 888 2155

Barb Lawson
316 Old Highway 97
Brewster, WA 98812
Tel: (509) 689 2957

Les and Viv Connell
PO Box 1595
Sumner WA 98390
(253) 848 6251

Dan Pearson
994 South Bank Road
Oakville, WA 98568
Tel: (360) 482 2406

Don & Helen Bair
6813 N.E. 139th St
Vancouver, WA 98686
Tel: (360) 573 8249

Dennis Buchmann
P.O. Box 1975
Brewster, WA 98812

J & C Dahlias
(509) 689-3211
3822 - 163rd Street E.
Tacoma, WA 98446
(253) 538 1091

Jan Jones
344 O'Brien Road
Port Angeles, WA 98362
Tel: (360) 452 8287 or
Cell: (360) 808 2980

Wayne Lobaugh Jr.
113 Ramsey Rd.
Chehalis, WA. 98532
(360) 748 4364 (evenings only)

Andy Hunter
2390 SE Old Olympic Hwy
Shelton WA, 98584
(888) 426 0781 (Toll Free)

Phil and Phillip II Mingus.
7407 N.E. 139th Street
Vancouver, WA 98662
(360) 573 2983

Mary Peterson & Val Pelsler
P. O. Box 127
Carnation, WA 98014
(425) 788 3053

Louis & Patti Eckhoff
20020 Des Moines Memorial Dr.
Seattle, WA 98198
(206) 824 3846

Bill Mishler
P.O. Box 1468
37003 NW Pacific Hwy
Woodland, WA 98674
(360) 225 8925

Walt & Cory Wynne
1395 Willey's Lake Rd.
Ferndale, WA 98248
(360) 384 3439

David & Leone Smith
P.O. Box 115
Chimacum, WA 98325-0115
(360) 732 7432

Ron & Betty Nieman
23858 SE 216th St.
Maple Valley, WA 98038
(425) 432 9744

Sandy & Steve Boley
12027 - 62nd Ave. S.
Seattle, WA 98178

Jim Lamson
130 Taylor Loop Road
Selah, WA 98942
Tel: (509) 697 6089

Dick & Susan Ambrose
2221 Harnden Loop
Camano Island, WA 98292
(360) 387 2374

There are numerous web sites dealing with dahlia production with useful information and updates on meetings and dahlia shows. Some of them are

a web page with information on dahlia viruses: <http://dahlia.wsu.edu>

American Dahlia Society <http://www.dahlia.org/>

List of dahlia societies in the US and Canada, listed by state/province:
<http://www.dahlias.net/adsccontacts.htm>

Some of the societies in Washington State:

Evergreen State Dahlia Association, Oakville, WA
Grays Harbor Dahlia Society, Oakville, WA
Inland Empire Dahlia Society, Spokane, WA
Kitsap County Dahlia Society, Silverdale, WA.
<http://www.kitsapdahlias.org/>
Mount Pilchuck Dahlia Society, Snohomish, WA
North Central Washington Dahlia Society, East Wenatchee, WA
Puget Sound Dahlia Society, Bellevue, WA.
<http://www.pugetsounddahlias.org/>
Seattle Dahlia Society, Seattle, WA
Skagit Valley Dahlia Society, Burlington, WA
Snohomish County Dahlia Society <http://www.scdahlias.org/>
South Sound Dahlia Association, Olympia, WA
Washington State Dahlia Society, Puyallup, WA
<http://www.geocities.com/washingtonstatedahliasociety/>
Whatcom County Dahlia Society, Ferndale, WA

Location

of production: Chelan, Clark, Clallum, Cowlitz, Grant, Grays Harbor, Island, Jefferson, King, Kitsap, Lewis, Mason, Okanogan, Pierce, Skagit, Snohomish, Spokane, Thurston, and Whatcom and Yakima counties.

