

Broccoli Seed

Brassica oleraceae (Cruciferae)

Fast Facts:

Acres in Washington: fewer than 20
Percent Acre Value: \$1000-\$1200
Value of Production in Washington: \$20,000-\$24,000
Number of Growers: 5 to 10

Description of crop:

Broccoli seed is direct-seeded in early April and harvested in early September. The crop is hand-hoed to control weeds and rogued to remove plants not displaying true varietal characteristics. At harvest, the crop is combined, and the seed is sent to a conditioning plant, where it is cleaned to 99 % purity. There is very little broccoli seed grown in Washington State compared to historical acreage.

Key pests:

Severe insect pests include cabbage aphid, turnip aphid, seedpod weevil, and cabbage maggot. Other insect pests include cabbage looper, springtails, webworms, diamondback moth, cutworms, symphylans and wireworms. Weed pests include shepherdspurse, mustards, lambsquarter, pigweeds, smartweed, henbit, groundsel, chickweed, wild turnip, quackgrass, wild oat, Canada thistle, bolt thistle, vetch, nightshades and bed straw. Shepherdspurse is one of the more problematic weeds. The most serious diseases are powdery mildew, downy mildew, *Alternaria* black spot and white mold (*Sclerotinia sclerotiorum*). Additional diseases are caused by *Botrytis cinerea* (gray mold) and bacteria (soft rots on the opening heads in winter/early spring). Birds such as starlings and robins are also major pests.

Key pesticides:

Chlorpyrifos and permethrin are used for insect control, and endosulfan is applied mid-bloom to control seedpod weevil, cabbage maggot, cutworms and loopers. Poast controls grass weeds. Stock seed is treated with mefenoxam and thiram and sometimes fludioxonil to control seedling blights. Iprodione is applied to control *Alternaria* black spot and white mold. Boscalid and cyprodinil + fludioxonil are also used for white mold. Mefenoxam, metalaxyl and cymoxanil control downy mildew. Azoxystrobin and pyraclostrobin are used to control powdery mildews, *Alternaria* black spot and white mold. Mancozeb and chlorothalonil are used for general disease control.

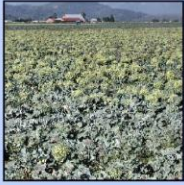
Critical pest control issues:

As with most seed crops, few pesticides are registered for use. Obtaining new pesticide registrations is a top priority for growers.

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Location
of production: Skagit, and Snohomish counties



Broccoli Seed - Skagit County

Broccoli Seed Production in Washington State



Counties Producing Broccoli Seed* (ranked by acres in production)

- 100 acres or less
- 25 acres or less

* Includes only those counties with significant crop acres.
The crop may also be produced in counties not highlighted on the map.



Deborah Bahs - April 2007