Table 1. Hot-Water Seed Treatment Protocols

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Crop	Temperature	and time	Reference
Brussels sprouts	122°F	25 minutes	1, 3, 4
Broccoli	122°F	20 minutes	1, 2, 3
Cabbage	122°F	25 minutes	1, 3, 4
Carrot	122°F	20 minutes	1, 2, 3
Cauliflower	122°F	20 minutes	1, 3, 4
Celeriac	118°F	30 minutes	3
Celery	118°F	30 minutes	1, 3
Chinese cabbage	122°F	20 minutes	1, 4
Collards	122°F	20 minutes	1, 3, 4
Coriander	127°F	30 minutes	4
Cress	122°F	15 minutes	1, 3, 4
Cucumber	122°F	20 minutes	1, 4
Eggplant	122°F	25 minutes	1, 3, 4
Kale	122°F	20 minutes	1, 3
Kohlrabi	122°F	20 minutes	1, 3, 4
Lettuce	118°F	30 minutes	1, 3, 4
Mint	112°F	10 minutes	4
Mustard	122°F	15 minutes	1, 3, 4
New Zealand Spinach	120°F	60-120 mins	4
Onion (sets)	115°F	60 minutes	4
Parsley	122°F	30 minutes	5
Pepper	125°F	30 minutes	1, 3, 4
Radish	122°F	15 minutes	1, 3
Rutabaga	122°F	20 minutes	3, 4
Shallot	115°F	60 minutes	4
Spinach	122°F	25 minutes	1, 3, 4
Sweetpotato (roots)	115°F	65 minutes	4
(cuttings, sprouts)	120°F	10 minutes	4
Tomato	122°F	25 minutes	1, 3, 4
Turnip	122°F	20 minutes	1, 3, 4
Yam (tubers)	112°F	30 minutes	4

125°F = 51.5 °C 122°F = 50 °C 118°F = 48 °C
125.6°F = 52 °C 131°F = 55 °C 132.8°F = 56 °C

1 Seed Treatments for Commercial Vegetables in Kentucky. by Bill Nesmith 7-94
2 http://agspsrv34.agric.wa.gov.au/agency/pubns/farmnote/1990/F09090.htm
3 Hot Water and Chlorine Treatment of Vegetable Seeds to Eradicate Bacterial Plant Pathogens. Ohio State University Extension Fact Sheet. By Sally Miller and Melanie Ivey.
4 Vegetable Seed Treatment. University of Illinois Extension. RPD No. 915. March 1992. By Mohammed Babadoost.
5 Hot water treatment of vegetable seed – an alternative seed treatment method to control seed borne pathogens in organic farming. *Journal of Plant Diseases and Protection* 110(3):pp. 220-234. 2003. By Eva Nega et. al.

Note: Hot water treatment can be damaging or not practical for seeds of peas, beans, cucumbers, sweet corn, beets and some other crops. Some hybrid varieties of cauliflower may be damaged by the recommended treatment. From:
http://agspsrv34.agric.wa.gov.au/agency/pubns/farmnote/1990/F09090.htm
Vegetable seed treatments. Farmnote 90/1990

Table 2. Diseases of Vegetable Crops Caused by Seed-borne Pathogens

Seed companies manage and test for many of the diseases listed here.

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Crucifers (Cabbage, broccoli, cauliflower, Brussels sprouts, kale)

Alternaria leaf spot
Bacterial leaf spot (peppery leaf spot)
Black leg
Black rot

Carrot

Alternaria leaf blight
Bacterial leaf blight
Cercospora leaf spot
Crater rot and foliar blight

Celery

Bacterial leaf spot
Early blight (aka Cercospora leaf spot)
Late blight (aka Septoria leaf spot)
Phoma crown and root rot

Eggplant

Anthracnose
Alternaria early blight
Phomopsis
Verticillium wilt

Lettuce

Anthracnose
Bacterial leaf spot
Lettuce mosaic virus
Septoria leaf spot
Verticillium wilt

Onion

Botrytis neck rot
Downy mildew
Purple blotch
Smut
Stemphylium leaf blight

Parsnip

Phoma canker

Pepper

Anthracnose fruit rot
Bacterial leaf spot
Cucumber mosaic virus
Pepper mild mottle virus
Tobacco mosaic virus
Tomato mosaic virus

Spinach

Anthracnose
Cladosporium leaf spot
Cucumber mosaic virus
Downy mildew (aka Blue mold)
Fusarium wilt
Stemphylium leaf spot
Verticillium wilt

Tomato

Alfalfa mosaic virus
Anthracnose
Bacterial canker
Bacterial speck
Bacterial leaf spot
Cucumber mosaic virus
Early blight
Fusarium wilt
Late blight (requires both mating types)
Leaf mold
Septoria leaf spot
Tomato mosaic virus
Verticillium wilt
Double virus streak

Turnip, Rutabaga and Radish

Alternaria leaf spot, brown spot
Black rot
Black leg