XHT1087

University of Wisconsin Garden Facts

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UW Extension
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Provided to you by:

Degree Days for Common Fruit and Vegetable Insect Pests

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COMMON VEGETABLE INSECTS THAT CAN BE MONITORED USING DEGREE DAYS OR INDICATOR PLANTS

Cabbage Maggot

Base temperature = 43°F
300, 1476, 2652 DD_{43} for 1st, 2nd, & 3rd generations flies
1st generation eggs are laid when the common lilac is in full bloom

Colorado potato beetle, 1st generation

Base temperature = 50°F
Begin counting when first eggs appear
1st instar larva at 185 DD_{50}
2nd instar larva at 240 DD_{50}
3rd instar larva at 300 DD_{50}
4th instar larva at 400 DD_{50}
Pupa at 675 DD_{50}

Common Asparagus Beetle

Base temperature = 50°F
Egg laying at 150 – 240 DD_{50}
(Amelanchier full bloom, redbud early to full bloom, Black Hills spruce bud caps splitting)

Corn Rootworm

Base temperature = 50°F
Adult beetles present at 1300 DD_{50}
(Canada thistle seed ripe, Queen Anne's lace early bloom)

European Corn Borer

Base temperature = 50°F
1st spring moths at 375 DD_{50}
(Spiraea x vanhouttei in full bloom)
1st eggs at 450 DD_{50}
(Pagoda dogwood late bloom)
Peak spring moths at 631 DD_{50}
(Black locust full bloom)
1st summer moths at 1400 DD_{50}
(Mountain-ash fruit golden yellow, most Canada thistle seed ripe)
1st eggs at 1450 DD_{50}
1st egg hatch at 1550 DD_{50}
Peak summer moths at 1733 DD_{50}
Summer treatment period at 1550 – 2100 DD_{50}
(Queen Anne's lace full bloom – 1500 to goldenrod early bloom – 2100)

Fleabeetles

Base temperature = 50°F
150-200 DD_{50}
(Norway maple late bloom, Amelanchier blooming, redbud early bloom)

Imported Cabbageworm

Base temperature = 50°F
Adult butterflies at 150-240 DD_{50}
(Amelanchier full bloom, redbud early to full bloom, Black Hills spruce bud caps splitting)

Onion Maggots

Base temperature = 40°F
680, 1950, 3230 DD_{40} for 1st, 2nd, & 3rd generation flies
1st generation eggs laid 230-280 DD_{40}

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Squash Vine Borer
Base temperature = 50°F
Egg laying at 900-1000 DD_{50}
(Chicory full bloom)

Seed Corn Maggot
Base temperature = 39°F
200, 600 for 1st and 2nd generation flies

COMMON FRUIT INSECTS THAT CAN BE MONITORED USING DEGREE DAYS OR INDICATOR PLANTS

Apple Maggot*
Base temperature = 50°F
1st adult fly emergence 900 DD_{50}
1st egg laying 1100 DD_{50}
Peak fly emergence 1600 DD_{50}
Peak egg laying 1750 DD_{50}
End of fly emergence 2800 DD_{50}

** These degree days assume normal soil moisture. Under dry conditions, all apple maggot events will be delayed until the soil is moist.*

Codling Moth
Base temperature = 50°F
1st generation moth emergence 150 DD_{50}
Eggs laid 250 DD_{50}
1st generation peak moth emergence 500 DD_{50}
Peak egg laying 550 DD_{50}
2nd generation first moth emergence 1150 DD_{50}
2nd generation peak moth emergence 1600 DD_{50}
2nd generation peak egg laying 1700 DD_{50}

Obliquebanded Leafroller
Base temperature = 43°F
1st generation moth emergence 600 DD_{43}
1st generation peak moth emergence 800 DD_{43}
1st generation peak egg laying 1250 DD_{43}
2nd generation moth emergence 2050 DD_{43}
2nd generation first eggs laid 2300 DD_{43}

For more information on phenology: *See University of Wisconsin Garden Facts XHT1085, XHT1086 and XHT1088, or contact your county Extension agent.*

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