X1087

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Provided to you by:

Degree Days for Common Fruit & Vegetable Insect Pests

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

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)

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

Corn Rootworm
- Base temperature = 50°F
- Adult beetles present at 1300 DD_{50} (Canada thistle seed ripe, Queen Annes' Lace early bloom)

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)

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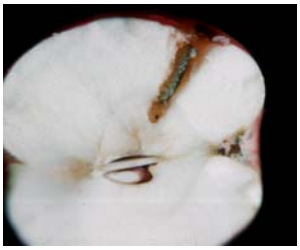
Cabbage Maggot
- Base temperature = 43°F
- 300, 1476, 2652 DD_{43} for 1st, 2nd, & 3rd generations flies
- 1st generation eggs are laid when the common lilac is in full bloom

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}

COMMON FRUIT INSECTS THAT CAN BE MONITORED USING DEGREE DAYS:



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}

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.

See related fact sheets:
Phenology
Degree Day Calculation

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