

## Apple Scab Infection Chart

Apple scab infections occur during wetting periods when moisture stimulates the pathogen spores to germinate and penetrate plant tissue. The scab prediction table given here can be used to determine whether or not conditions have been sufficient for infection so that appropriate spray decisions can be made. Listed are the Mills table as revised by Alan Jones, used by Michigan growers for many years, and a more recent revision of the table by MacHardy, Gadoury, and Stenvand.

Work by Jones and others have shown that, although the majority of primary scab spores (ascospores) are released during daylight hours, nighttime release can occur as well. Secondary spores (conidia) are available for infection during wetting periods anytime the pathogen has become established on the foliage or fruit. The same table can be used for primary (ascospore) or secondary (conidia) infection.

**Table 1.** Approximate number of hours of wetting for primary apple scab infection at different air temperatures.

Temperature Average (F)	Mills revised by Jones	MacHardy & Gadoury (1989), as Amended by Stenvand et al. (1997)
34	48	41
36	48	35
37	41	30
39	33	28
41	26	21
43	21	18
45	17	15
46	16	13
48	15	12
50	14	11
52	12	9
54	11.5	8
55	11	8
57	10	7
59	10	7
61 - 75	9	6
77	11	8

**Notes:** The infection period is considered to start at the beginning of the rain. Symptoms, if the infection is successful, will generally appear after 9 days incubation with average daily temperatures at 60 F and after 16 days or more with average daily temperatures below 50F.

**Please send any comments or suggestions regarding this site to:**

Bill Klein, [kleinw@msu.edu](mailto:kleinw@msu.edu)

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