

The Soybean Aphid

The soybean aphid native to Asia and is now widespread throughout the Midwestern United States.

The aphid is small and yellow with distinct black cornicles ([see photo](#)). It can be found on stem apices and young leaves of growing soybean plants and on the undersides of leaves of mature plants. While several aphid species feed on soybeans, no other aphids develop colonies on soybean in the United States. Therefore it is safe to assume that colonies of yellow aphids on soybeans are the soybean aphid.

The aphid has a host alternating life cycle ([see diagram](#)) in which it survives winter as eggs on a primary host, believed to be *Rhamnus* spp., and then migrates in the spring to its secondary host, soybeans. The aphid can have as many as 15 to 18 generations annually so colonies can build quickly in soybeans.

The relative distribution of primary and secondary hosts appears to influence aphid dynamics in soybeans ([Takahashi et al., 1993](#)). Aphids appear to infest soybeans earlier and at higher densities in fields near overwintering sites than in soybeans located farther from overwintering sites. The spatial relationship between *Rhamnus* populations and soybean fields may therefore play a critical role in the timing and intensity of aphid infestations.

Damage in replicated field trials has been estimated as high as 16 ([Ostlie 2001](#)) and the aphid has triggered the first insecticidal applications in Minnesota, Michigan, Illinois, Indiana, Ohio, and New York.

In addition to feeding on soybean leaves, the aphid is capable of transmitting a number of viruses including alfalfa mosaic, soybean mosaic, bean yellow mosaic, peanut mottle, peanut stunt and peanut stripe.

To report an infestation in your area please see:

Soybean Aphid Watch 2002:

<http://www.pmcenters.org/Northcentral/Saphid/Aphidindex.htm>