



Over the past few years, the media has been hyping the threat of a menace, a brilliant, metallic-green insect pest called the emerald ash borer (EAB). This alien invader came to the United States from northern China and/or Korea. Interestingly, this pest was never found outside of Asia before 2002, but it arrived in Detroit, Michigan, in 2002, as a stow-away in wooden packing materials.

The infestation is spreading. On its own, the emerald ash borer flies about one-half mile a year. The biggest contributors to its spread are people moving infested firewood. Through this method, an unsuspecting camper can move EAB hundreds of miles in a single day. All North American ash species are at risk. Once an ash tree becomes infested, it always dies. Fortunately, this green menace has **not yet** arrived in Nebraska. Unfortunately, entomologists say, “It’s only a matter of time.”

Although the EAB poses a serious potential threat to our ash trees, I recently received news from Julie C. Van Meter, Entomology Program Manager, and State Entomologist for the Nebraska Department of Agriculture (NDA) about a new Asian invasion— one that is already here!

For years, the NDA has been conducting annual surveys for this pest. It invaded the United States in the early 1900’s. Arriving first on the eastern seaboard, over the years it, too, has spread. I’m referring to *Popilla japonica Newman*, more commonly called Japanese beetle (JB). The NDA recently declared twelve counties in Nebraska infested with JB. They are Buffalo, Cass, Dakota, Dodge, Douglas, Hall, Hamilton, Lancaster, Saline, Sarpy, Saunders, and Washington.



Having received this alarming news, I immediately contacted Ms. Van Meter. I informed her that over my past eleven years with Extension in Buffalo County, I have yet to come in contact with the Japanese beetle. She quickly responded, and I quote, “*We called Buffalo County infested in December, 2012, based on trapping results from the last few years. The numbers weren’t nearly what we see in Omaha but did indicate an overwintering population, so it may be a few years until homeowners really start to see an impact. When and if you do get a specimen sent to you, I’d appreciate knowing about it.*”

With such a message of gloom and doom, I felt compelled to write about this highly destructive plant pest. Like other white grubs, the larvae stage of this insect feeds on grass roots, damaging lawns, golf courses and pastures. To make matters worse, the adults are also

voracious plant feeders, attacking and damaging foliage, flowers and fruits of more than three hundred species of ornamental and agricultural plants.

The adult Japanese beetle can be seen flying about in late spring or early summer. It is slightly less than ½ inch long and has a shiny, metallic-green body with bronze-colored outer wings. Males are usually smaller than females. The beetle has five small tufts of white hair along each side and two tufts of white hair on the back of its body, under the edges of its wings.

During the adult feeding period, females intermittently leave plants, burrow about three inches into the soil of turfgrass and lay a few eggs. This cycle repeats until the female has laid forty to sixty eggs. By midsummer, the eggs hatch, and the young larvae begin to feed ravenously on grass roots. The grubs grow to approximately an inch in length and appear curled. In late autumn, the grubs burrow deeply into the soil and remain inactive through the winter. In early spring, the grubs return to the root area of turf and feed until late spring at which time they pupate. In about two weeks, the pupae become adult beetles, emerge from the ground, mate, and begin feeding voraciously on ornamental plants.

Pesticide applications of carbaryl (Sevin), Permethrin, bifenthrin or acephate work well on destroying adults. With heavy infestations, additional applications may be needed.

The grubs are best controlled when they are small and actively feeding near the surface of the soil. Applying imidacloprid (Merit) or halofenozide in late June or July provides sufficient residual activity to kill the new grub populations as they come to the soil surface. When grubs are large, such as in late fall or early spring, trichlorfon (Dylox) and carbaryl (Sevin) work best. The key to good control is to make an even application and water in thoroughly. As with all chemicals, always follow the directions on the label. For more information go to the following website:

http://www.aphis.usda.gov/plant_health/plant_pest_info/jb/index.shtml



Although the green menace EAB is yet to arrive, JB is in the state. Please let me know if you find any evidence of either Asian invasion.