



Soil Sampling Record for Japanese Beetle

Wisconsin Department of Agriculture • Plant Industry • Nursery Program

For a 20XX Japanese Beetle Compliance Agreement (*Compliance Agreement cannot be signed until this record is returned.*)

NURSERY:	MAILING ADDRESS:
FIELD NAME (use one sheet for each field):	FIELD SIZE (ACRES):
DATE OF SAMPLING:	SAMPLING VERIFIED BY DATCP INSPECTOR:

SAMPLING METHOD: Cup Cutter or similar coring device Spade or Shovel

Sample #	GPS Coordinates	JB Grub found?
1		
2		
3		
4		
5		
6		
7		
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9		
10		
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12		
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Sample #	GPS Coordinates	JB Grub found?
30		
31		
32		
33		
34		
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3. Field Grown Nursery Stock Accreditation Program

The purpose of this program is to certify plants from nursery sites or individual nursery fields, located *within* an infested area, as posing an acceptably low risk of harboring Japanese beetle for Category 2 states.

Under regulatory oversight, nursery operations producing field-grown plants shipped as balled & burlapped or field-potted plants may be certified under this program. It is recommended that shipping nurseries be placed under a compliance agreement. Procedures under a compliance agreement will be monitored closely throughout the season by the phytosanitary authority. This compliance agreement should indicate applicable production, treatment and documentation procedures.

Plant shipments should be accompanied by a state phytosanitary certificate, or equivalent certificate of compliance, that includes the following Additional Declaration (AD): *“The rooted plants (or plant material) are certified as apparently free of Japanese beetle (Popillia japonica) in accordance with the Field Grown Nursery Stock Accreditation Program protocol, as provided in the U.S. Domestic Japanese Beetle Harmonization Plan.”*

This option incorporates production practices that reduce Japanese beetle pest risk, coupled with a soil sampling protocol to assure adequate risk mitigation. Accreditation will not be granted if *more than one* Japanese beetle larva is collected during sampling.

Management practices include all the following:

Maintenance of a weed-free zone. A weed-free zone is that area of the field that occupies the intended rootball size of the nursery stock plus 12-inches on all sides. A weed-free zone may be established based on mechanical cultivation, use of herbicides capable of killing the above and below-ground portions of weed plants, use of plastic film or barrier cloth, or use of exclusion techniques such as grow-pot. Weed-free zones must be established before weed establishment and continued throughout the adult flight season (June to September).

Weeds should be killed when young to minimize presence of organic matter. Areas of the field outside the critical zone may be managed as the grower chooses.

Japanese beetle adult and larval treatments. Application of adult and/or larval pesticide treatments, *as needed*, based on conditions in the participating nursery. While no specific treatments are mandated, several pesticides are registered for nursery usage for Japanese beetle control. Proper application timing is the key to desired efficacy, particularly for larval treatments. Because research efforts are ongoing, and registrations are subject to change, consult state regulatory and extension personnel for specific recommendations.

Soil sampling. Acceptably low levels of Japanese beetle infestation shall be verified by soil surveys conducted at a rate based on acreage to be accredited. All larvae collected must be examined by a regulatory official to confirm species. Larvae may be forwarded to a specialist for positive identification if species determination cannot be made on-site. Sampling records and maps shall be maintained and made available to plant protection authorities upon request.

Samples should be taken when the majority of larvae are second or third instars (September - May) either uniformly or at random locations throughout the entire field. **Samples should be specifically taken in the harvest area of the nursery growing rows.**

Specific areas with a higher susceptibility for harboring Japanese beetle grubs, such as weedy or grassy areas, should be given additional attention.

When most larvae are near the soil surface (**September to October and April to May**), **samples are taken at a depth of four to six inches. From November to March, samples must be taken to a depth of eight inches.** Accreditation cannot be granted if *more than one* Japanese beetle larvae is collected during sampling. The following are approved sampling methods using the table below for the number of samples required:

Cup cutter or similar coring device. Soil is sampled using a cup cutter or similar coring device no smaller than 4.25 inches in diameter. These cup cutters are available from golf course supply companies. Random samples should be taken from within growing rows to the recommended depth.

Spade or shovel. Soil is sampled using a spade no smaller than 7-inches wide to extract soil "squares". Random samples should be taken from within growing rows to the recommended depth.

Table 1. Determining Numbers of Soil Samples to Collect		
Block Size (Acres)	Cup Cutter Method	Spade Method
0.1 - 1.0	50	20
1.1 - 5.0	70	30
5.1 – 10.0	80	35
10.1 – 25.0	90	40
25.1 – 50.0	125	50
>50.0	125 plus 2 samples for each additional 10 acres	50 plus 1 sample for each additional 10 acres

See requirements for Japanese beetle Adult Mitigation Criteria in the JBHP June 1 – September 30.