

ASK THE EXPERT

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Borer problems on oaks

Problem: What can be applied to control two-lined chestnut borer problems on oak trees? (Georgia)

Solution: Two-lined chestnut borers generally invade plants stressed and weakened by drought and/or defoliation from feeding insects (i.e. gypsy moth). Early foliage diseases like anthracnose and/or frost can also damage the first set of leaves produced. These problems affect trees' overall health. Borer insects and canker disease fungi establish on these stressed and weakened plants.

Reports indicate that insecticides such as Lindane or Dursban can be used around middle to late June and again in middle to late July to manage the borer problem. Make sure to provide a thorough coverage.

In recent years, we have seen more and more borer problems on many established plants, including oak. The droughts of 1988 and 1991 have made many plants weak and susceptible to borer insects and canker diseases.

Provide proper watering, mulching and fertilizing, and pest management as needed to help improve plant health.

Portulaca weeds in beds

Problem: What is the best way to manage portulaca weed? We are having some problems in ornamental bed areas. (Ohio)

Solution: To manage portulaca weed, use herbicides such as Treflan (trifluralin). It will help manage several other broadleaf and annual grasses as well. Treflan is available in 5% granular and liquid formulations.

Treflan should be incorporated two to three inches into the soil and irrigated immediately after application. It is safe on nearly all landscape plants and is highly recommended by Ohio State University during the first growing season of woody plants in new groundcover and flower garden plantings.

Refer to the label for specific rates of different formulations and directions for use.

Increasing soil pH with lime

Problem: How many pounds of lime per 1,000 square feet is needed to adjust soil pH one unit in a growing season? (Maryland)

Solution: From your question, I believe you are dealing with a low pH soil. Application of lime is recommended to increase soil pH. The amount of lime needed to be applied depends on soil testing recommendations. These recommendations, in turn, depend on soil type, soil organic matter composition, and soil cation exchange capacity. For example, a heavy clay soil may require a higher rate of lime to increase a given unit of pH than other types.

The best way to determine the amount of lime needed is to

have a soil test done. Check with your local extension service and/or soil testing laboratory nearby. Also, the following charts should help you determine the amount of lime needed to adjust different pH units to 6.5:

Amount of lime needed to correct soil acidity¹

pH	Soil textural class			
	A	B	C	D ²
4.0-4.5	85	113	158	190
4.6-5.0	75	98	135	165
5.1-5.5	58	75	105	135
5.6-6.0	35	45	68	90

KEY:

- A - sand or loamy sand
- B - sandy loam
- C - loam, silt loam or silt
- D - clay loam, silty clay loam, sandy clay loam, clay, sandy clay or silty clay

¹In pounds of ground agricultural limestone per 1,000 sq. ft. of lawn area to correct pH to 6.5. (NOTE: single applications should not exceed 50 lbs. per 1,000 sq. ft. within a six-month period.)

²Class D is commonly used.

Defining soil acidity, alkalinity

pH 4.0 intensely acid	pH 7.0 neither acid nor alkaline	pH 8.0 slightly alkaline
pH 5.0 moderately acid		pH 9.0 moderately alkaline
pH 6.0 slightly acid		

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Mail questions to "Ask the Expert," LANDSCAPE MANAGEMENT, 7500 Old Oak Blvd., Cleveland, OH 44130. Please allow two to three months for an answer to appear in the magazine.