

USING WOOD ASH

Wood ash from the fireplace or a wood stove may be used to supply both calcium and potassium to soil. The pH level of soil is measured on a scale of 0 to 14, with 7.0 being neutral. Target pH for growing a garden is 6.5, which is slightly acidic. Wood ash works best if the soil pH level is somewhat acidic, below 6.5. Wood ash is high in calcium content, with the effect of raising soil pH. When wood ash is used at pH levels above 6.5, interference with plant growth may occur as the alkalinity level of the soil increases.

To determine if a garden is a good prospect for wood ash, get a soil test. Details for taking a soil test are available from the Michigan State University Soil and Plant Nutrient Laboratory. It is recommended that garden soil be tested every two to three years to determine current nutrient levels and to make nutrient adjustments accordingly.

Wood ash is composed of many major and minor elements needed by the tree for plant growth. Since most of these elements are extracted from the soil and atmosphere during the tree's growth cycle, they are elements that are common in our environment and are also essential elements in the production of crops and forages. Calcium is the most abundant element in wood ash and gives the ash properties that are similar to agricultural lime. Ash is also a good source of potassium, phosphorus, magnesium and aluminum. In terms of commercial fertilizer, average wood ash would probably be about 0-1-3 (N-P-K). In addition to these macronutrients, wood ash is a good source of many micronutrients that are needed in trace amounts for adequate plant growth. Wood ash contains few elements that pose environmental problems. Heavy metal concentrations are typically low and not in a highly extractable or available form.

Wood ash can be applied directly on the surface of the garden. On sandy soil, it takes approximately 50 pounds of wood ash per 1,000 square feet to raise the soil pH from 6.0 to 6.4. On sandy loam, it takes 140 pounds, and on clay soils, it takes 185 pounds of wood ash to raise the pH from 6.0 to 6.4.

Ref: MSU Extension, Wood Ash in the Garden

The **Master Gardener Hotline** is open from April to October, Monday through Friday. Lines are available 9:00 am to noon and 1:00 pm to 4:00 pm at 888-678-3464

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