

USE WOOD ASHES IN THE GARDEN WISELY

By: Alicia Lamborn, Horticulture Agent, UF/IFAS Extension Baker County

You may have heard that wood ashes can be used in the garden as a source of potassium for plants. But since wood ashes also increase the soil pH and require other precautions, they should be used in the garden wisely.

Hardwoods vs. Softwoods

The fertilizer value and liming effect of wood ash depends on whether you burn hardwoods (e.g. oak) or softwoods (e.g. pine). Wood ash analyses generally run from 4-10% potassium and from 1-2% phosphorus. Compared to softwood ashes, hardwood ashes contain higher percentages of nutrients and have more of a liming effect on soil.

Avoiding Toxic Levels of Ash

Although hardwood ash is only about half as effective as lime for raising soil pH, it should still be used with caution. While some sources recommend a yearly application rate of 25-50 lbs. of ash per 1,000 square feet, other sources say apply no more than 10-15 lbs. of ash per 1,000 square feet per year. Regular soil testing is suggested to monitor changes in soil pH and avoid toxic levels of ash. Some gardeners add small amounts to the compost pile, and then add the composted soil to the garden with good results.

Tips for Using Wood Ashes as a Soil or Compost Amendment

The following advice is offered from Dan Sullivan, soil scientist with the OSU Extension Service:

- Protect yourself when applying wood ash. Use the same precautions you would use when handling household bleach, another strongly alkaline material. Wear eye protection and gloves. Depending on the fineness of the ash, you may want to wear a dust mask.
- Do not use ash from burning trash, cardboard, coal or pressure-treated, painted or stained wood. These substances contain trace elements, harmful to many plants when applied in excessive amounts. For example, the glue in cardboard boxes and paper bags contains boron, an element toxic to many plant species at levels slightly higher than that required for normal growth.
- Do not use ash on alkaline soils or on acid-loving plants such as blueberries and azaleas.
- Do not apply wood ash to a potato patch as wood ashes may favor the development of potato scab.
- Do not apply ash to newly germinated seeds, as ash contains too many salts for seedlings.
- Do not add ash to nitrogen fertilizers such as ammonium sulfate (21-0-0-24S), urea (46-0-0) or ammonium nitrate (34-0-0). These fertilizers produce ammonia gas when placed in contact with high pH materials such as wood ash.

References:

Savonen, C. (2007). Wood ash can be helpful in yard if used with caution. Oregon State University, <http://extension.oregonstate.edu/gardening/node/39/print>

Traunfeld, J. and Nibali, E. (2013). Soil Amendments and Fertilizers. University of Maryland, HG42.