This column features questions from readers submitted via the website. To submit a question to Small Acre Sam, visit **BarnyardsandBackyards.com.** If your question is featured, you will receive a free one-year subscription to *Barnyards & Backyards*!

Sam

question

Dear Sam,

What are the risks of residual herbicides in compost and manure I use in my garden? – *Katie, Worland*

Dear Katie,

Most herbicides break down quickly (within weeks) in the compost pile or when exposed to sun, heat, and soil microbes. However, one class of herbicides may persist up to several years in soil, livestock manure, mulch, and compost. There are many available products with active ingredients belonging to this class of herbicides; specifically aminopyralid, clopyralid, picloram,



and aminocyclopyrachlor. Be sure to carefully read the labels for a list of active ingredients and instructions on use. These herbicides are effective at very low concentrations (parts per million). Signs of residual herbicide damage are stunted growth and curled, cupped leaves.

These herbicides are also unique in that they persist in the manure of livestock that eat hay or grass harvested from fields where used. When this manure is applied to gardens, or used for compost, the herbicide can damage sensitive plants. Another source of accidental herbicide contamination can be grass clippings from a lawn sprayed with these herbicides, or straw from fields treated with these herbicides used as mulch or for a straw bale garden.

What can you do about it?

- 1. Do not use products containing these active ingredients on your lawn if you plan to compost grass clippings or use them as mulch.
- 2. If using livestock manure in the garden (even after composting), find out what herbicides were used on the fields where the animals grazed or where the hay was grown.
- 3. Conduct a simple test for herbicide residues before adding compost to your garden. Plant peas or other sensitive plants in a mixture of soil and compost and observe for signs of herbicide damage (curled leaves, stunted growth).

For more information about herbicide contamination, including instructions for a bioassay, see (we use the URL shortener Bitly) http://bit.ly/askcaitlin.

– Sam