

DRIFTING ACROSS THE LANDSCAPE. Dawn E. Nordby, Michelle L. Wiesbrook, and Scott M. Bretthauer, Extension Specialist, Department of Crop Sciences, University of Illinois, Urbana, IL 61801, Extension Specialist, Department of Natural Resources and Environmental Science, University of Illinois, Urbana, IL 61801, and Extension Specialist, Department of Agricultural and Biological Engineering, Urbana, IL 61801.

Every year the number of drift problems is increasingly higher, keeping applicators, Extension specialists and educators, Illinois Dept. of Ag. inspectors, and lawyers very busy. Diagnosing crop injury from herbicides can be difficult; however, dealing with ornamentals, which may be unfamiliar, coupled with emotional land- or homeowner(s) can really be challenging. Just as weed species and crops vary in their degree of susceptibility to different herbicides, landscape and garden plants do too. Over the years, many have relied on the use of photographs of injured crop plants in identifying herbicide drift. Unfortunately, similar resources based on landscape and garden plants are quite limited. To fulfill this need, field studies were conducted during the summer of 2004 in Urbana, IL. Several species of ornamental and vegetable plants were treated with various herbicides. Rates used were 1/5- and 1/10X. Injury symptoms were observed and photographed throughout the summer. A Drift Injury In-Service was held in July to examine and diagnose injury symptoms on ornamentals and crops, review herbicide mode of action, and go through farmer/homeowner problem simulation.

Plants included:

Woody plants: Redbud (*Cercis canadensis*), Red oak (*Quercus rubra*), Black walnut (*Juglans nigra*), White pine (*Pinus strobus*), Douglas fir (*Pseudotsuga menziesii*)

Small shrubs: Dwarf lilac (*Syringa patula*), Weigela (*Weigela florida*), Rose (*Rosa spp.*)

Perennials: Purple coneflower (*Echinacea purpurea*), Tickseed (*Coreopsis grandiflora*), Gloriosa daisy (*Rudbeckia hirta* var. *pulcherrima*), Russian sage (*Perovskia atriplicifolia*), Garden mum (*Chrysanthemum x morifolium*)

Annuals: Ageratum (*Ageratum houstonianum*), Salvia (*Salvia splendens*), Marigold (*Tagetes erecta*), Petunia (*Petunia x hybrida*), Coleus (*Coleus x hybridus*).

Vegetables: Hungarian yellow wax peppers (*Capsicum annuum* L.), tomatoes (*Lycopersicon esculentum*), and pumpkins (*Cucurbita pepo* L.).

Herbicides included:

2,4-D, atrazine, chlorimuron, clopyralid, dicamba, triclopyr, 2,4-D+mecoprop+dicamba, and glyphosate.