Overview
Recently UT Extension agents and specialists have received a significant increase in calls concerning suspected herbicide injury in trees. The symptoms appear to be consistent with injury caused by synthetic auxin herbicides such as dicamba or 2,4-D.

Identifying Auxin Herbicide Injury
On broadleaf plants, auxin herbicide injury is characterized by leaf margins “cupping” up or down to form a bowl. Occasionally, you’ll see “twisting” or “flattening” of new growth. On conifers, affected new growth may turn brown and die. It should be noted that conifers with drought injury display similar symptoms. Typically trees survive herbicide drift, but multiple occurrences of drift may cause gradual decline.

Managing Trees Injured by Auxin Herbicides

Water trees during dry periods. – A good soaking (30 min. per day, twice a week) will help recovery and minimize moisture stress. Irrigation will also help leach herbicides from the root zone of the plant.

Do NOT fertilize. – Never apply fertilizer to a stressed plant, as stimulating excess growth could compound injury. Avoid fertilization for at least one growing season, and even then, only fertilize if needed.

Avoid pruning. – Delay pruning at least one year to fully assess the extent of the injury.

What else can I do?

Document damage. The date should be noted and photos taken.

Contact the Tennessee Department of Agriculture. The TDA is tasked with investigating pesticide complaints. Call 1-800-628-2631 or go to tn.gov/agriculture.

Wait. Trees and shrubs should be left for at least one growing season after the damage has occurred to fully assess the potential for recovery. If herbicide injury is light, these plants typically recover.

For the latest updates, contact your local UT Extension office, or go to our website, extension.tennessee.edu.