For anyone battling weeds in their lawns, chemical sprays may seem like the obvious first choice. Although herbicides can be extremely effective weed control, they are the final step in a well-rounded weed control program.

The first step in a weed-free lawn is knowing the type of grass you're trying to grow and the square feet of lawn area you have. Second, identify the weed or weeds you're trying to eradicate. This can be the most challenging part of the process. No single product or practice will control all weeds for the entire season, so without proper identification control methods may be in vain.

If you have difficulty with this step, bring your samples either to the Shawnee County Extension office for our Extension Master Gardeners to identify or to the Shawnee County Weed Department. Both organizations offer free identification, but the Weed Department also sells herbicides and offers sprayer rentals. The best weed sample includes the entire weed (root to flower) and multiple samples. Fresh samples are preferred over dry or wilted samples.

Within weed identification, weeds can be broken into six categories. The categories tell you how to control the weeds in that group.

- Annual grasses are weeds that germinate, grow and produce seeds each year. They can resemble turfgrass in their growth but they differ in texture and color. Annual grasses are most effectively controlled with a pre-emergent product. Control of these weeds after they germinate is less effective and challenging.
 - Examples of annual grasses include; barnyardgrass, little barley, crabgrass, annual bluegrasss, foxtail, annual bromes, goosegrass, cheat, sandbur, downy brome and Japanese brome.
- Annual broadleaf weeds also complete their life cycle in a single season but they require different control measures than annual grasses. Unlike annual grasses, annual broadleaf weeds contrast from turfgrass in form, texture and in the broad nature of their leaves. Chemical control for broadleaf weeds can damage landscape plants if not applied properly. These weeds must be actively growing for effective control.
 - Examples of annual broadleaf weeds include; carpetweed, bedstraw, fleabane, chickweed, kochia, deadnettle, lambsquarter, henbit, lespedeza, knotweed, mallow, mustards, morning glory, pepperweed, oxalis, shepherd's-purse, pigweed, sowthistle, puncturevine, speedwell, purslane, wild geranium, ragweed, wild lettuce, smartweed, spurge.
- Perennial grasses are weeds that persist for multiple growing seasons. This multi-year growth means they have an extensive root system, even if their topgrowth dies back each year.
 Perennial grasses fall into the same category as turfgrass so selective control is generally not possible. This means that chemical treatment of perennial grasses will also kill the turfgrass in that area. You must then re-plant the desired grass before more weeds can become established.
 - Examples of perennial grasses include; Bermudagrass, tall fescue, nimblewill, quackgrass, silver beardgrass, orchardgrass, windmillgrass, rough bluegrass.
- Perennial broadleaf weeds also come back each year but unlike perennial grasses, these weeds can be selectively controlled in turfgrass. The important point for this category is that these weeds must be actively growing for chemical controls to be effective.

- Examples of perennial broadleaf weeds include; asters, bellflower, creeping oxalis, mallow, white clover, dandelion, dock, ground ivy, healall, mousear, chickweed, plantain, red sorrel, sheep, sorrel, thistles, violets, yarrow.
- Biennial weeds grow vegetativly (leaves and stems) for one year and the following year they flower and seed. For control purposes, this class of weeds can be treated like perennials. Examples of biennial weeds include; wild carrot, mullein, and some thistles. Some weeds such as black medic may fit more than one class.
- Miscellaneous weeds include those that are neither true grasses nor broadleaf weeds. These weeds may require special control methods.
 - Examples: algae, moss, nutsedge, wild garlic, wild onion.

Once your weeds are identified, look at the cultural practices that may help to combat their growth and establishment. Many weeds cannot compete with a thick, healthy lawn. Some of our winter annuals, such as henbit and chickweed are making their springtime debut in lawns. Chemical control in the spring would be a waste of time and money. With the heat of the summer, these winter annuals will die off. Permit nature to offer some weed control. Other cultural methods that control weeds include proper mowing heights, proper turf selection for your yard, thatch control, watering and proper disease and pest management.

If all cultural practices for your weeds have been followed and you still experience issues, chemical control is the final step in weed suppression. When using the chemical control method make sure to select a product that is safe for your turfgrass. Always follow all label directions and precautions. This includes; timing and rate and when repeat applications can be applied.

For more information on weed control in home lawns, including specific chemical information please visit: <u>https://www.bookstore.ksre.ksu.edu/pubs/mf2385.pdf</u> or call the Shawnee County Extension Office.