Revised April, 2020

Plant or Weed Identification Sampling Guidelines

At this time, the Plant and Pest Diagnostic Clinic (PPDC) doesn't have the assistance of a trained botanist for identification of terrestrial weeds, but knowledgeable Clemson personnel are available, if need be. Clients are encouraged to first contact their local county extension agent. Many of these agents are very knowledgeable and are especially well versed at weeds occurring in the diverse environments that make up the state of South Carolina. We still have a dedicated Specialist to identify aquatic weeds and algae.

Once plant specimens have been identified, an Extension Specialist will provide management recommendations, if needed. This procedure adds some time to the reporting process. If the client includes an email address, the plant identification will be sent as a preliminary report and the specialist's report will follow. Reports for those without email will be mailed once the final report is completed.

In order to get the most accurate identification, it is important to submit an entire plant that has developed flowers, seeds or fruits, as these reproductive structures will enable the most accurate identification. Obviously, it's not always possible to sample plants with these structures, as the plant may not be flowering or fruiting at the time. However, plants without reproductive structures can sometimes be identified when the whole plant or a representative sample of it is sent. Include a stem or branch which includes multiple leaves. Photographs or digital images provide a good supplement to large plant samples and should be considered for submission along with branch or shoot samples.

Submit terrestrial plants for identification in plastic bags, without added moisture. If roots are present, enclose these in a plastic bag and tie at the stem base, or cut and enclose in a separate plastic bag. If the plants are suspected exotics or invasive species, double bag them by placing the sample in a zip-lock bag and inserting that into a larger zip-lock bag. Turf samples should be un-mowed. Identification will be to genus and to species when possible, but identification of turf and ornamentals to cultivar is usually impossible. Mail all samples early in the week to ensure arrival in the same week.

Weed control recommendations can only be provided if the specific type of plant infested with the weed is listed. For example, if the weed is in a lawn, the infested grass, such as centipede or zoysiagrass, should be given. If it's in a flower or shrub bed, we need to know the types of plants growing there.

Aquatic Plant Sampling

Aquatic plants consist of vascular plants and algae. Often, they are entangled in a mass, making it difficult to separate one from the other. However, it is important to attempt to do this, as each type of plant should be submitted separately, and a fee paid for each type. Try to assess which type is most prevalent in the pond and attempt to collect that one as the sample. As with terrestrial plants, submitting vascular aquatics with flowers, fruits or seeds is preferred for the most accurate identification.

Place aquatic plant samples in tightly sealed plastic jars or double bag them in zip-lock bags that are taped closed. Samples of algae should be submitted in water in plastic bottles. Glass jars are discouraged, as these add to shipping costs and are more vulnerable to breakage if not packed properly.