FACT SHEET

L-1027

HOW TO COLLECT, PRESS, MOUNT AND STORE PLANTS

Bobby J. Ragsdale*

One of the most extensive, important and renewable resources of Texas is native vegetation. These plants furnish food for livestock, provide cover and food for wildlife, conserve soil and water, and produce timber products. Many plants are valuable as ornamentals; others are toxic to livestock and some are worthless. The vast number and variety of plants in Texas make it essential that individuals know the names of plants. This is why it is important to know how to collect, press, mount and store plants for proper identification.

Collecting Plants

Select a complete, representative plant. Include the roots, leaves, stems, flowers and seeds. Do not collect unusual, abnormal or diseased plants for identification.

Collect grasses, weeds, aquatic plants and legume specimens as a complete plant, since it usually is necessary to have all parts to make positive identification.

Tree and woody specimens should include a twig with 10 to 20 leaves, bark, flowers, fruits or seeds.

Use a shovel or other tool to dig grasses, weeds and legumes.

Select two or more specimens — one to submit for identification and one for your files.

Before Pressing Plants

1. Remove all soil from root system.
2. Bend, break or cut the plant and fold to proper size, 8½ x 11 inches or 11 x 16 inches, to fit herbarium paper for mounting.
3. Place folded plant between a folded single newspaper page and place in the press to dry.
4. Be sure to include all identifying plant parts on the specimen.

How to Press Plants

Press each specimen soon after it is collected. Keep plants between pages of a magazine during a collecting trip and until the plants are ready for pressing.

Place plants in single newspaper sheets folded to the same size as the press. Use only the amount of plant material that will dry properly. Place only one plant in each folded newspaper. Dryers to go between each specimen should be the same size as the press. They can be made from building felt, blotter paper or corrugated cardboard. Change dryers each day for 5 to 10 days to fully press the plant and to preserve color. Handle the plants by the specimen sheets until they are dry to retain the normal shape of the plant.

The press may be held together firmly with two canvas, web or leather belts. A bag filled with coarse gravel and placed on the press will help to do a better job of pressing, as the gravel may be shifted to equalize the pressure. When dry, retain the specimens in the folded paper or mount them on herbarium sheets.

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How to Make a Plant Press

A plant press can be made from 1- to 2-inch strips of ¼-inch plywood, ordinary lath or other light material. First, make a frame about 12x17 inches. Then place the strips running both ways and from 1 to 2 inches apart on the inside of each frame. It takes 8 to 12 strips of wooden material to complete the press. The strips may be nailed or riveted together. The slatted press allows maximum ventilation for good drying of plants.

How to Mount Plants

Standard herbarium mounting sheets are of moderately heavy, white paper 8½x11 inches or 11½x 16 inches. Mount the specimens for convenience of displaying and filing. There are several ways to mount the specimen, but a simple, practical way is to use narrow transparent tape or gummed cloth mending tape. Place the tape across the large stems and branches to hold the plant specimen firmly. The tape should not cover the flowers and other plants to be observed for identification.

Select a representative plant.

How to Store Plants

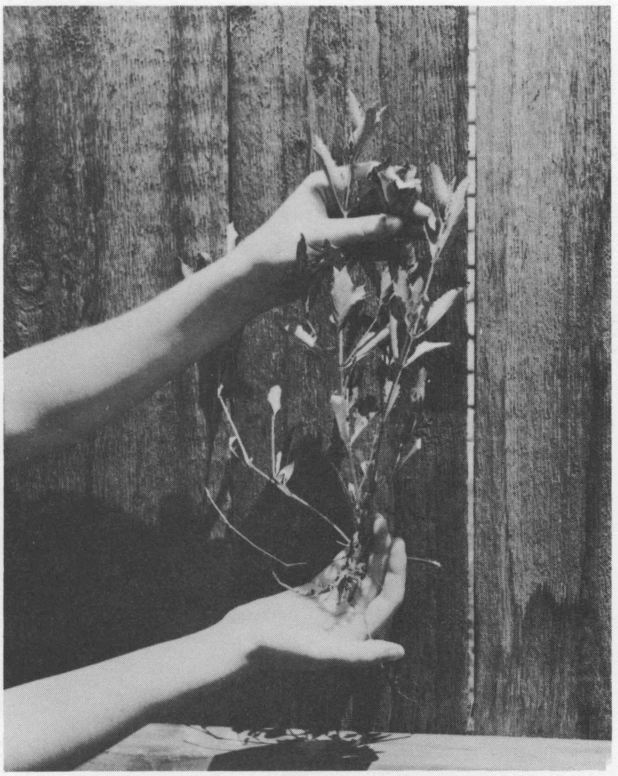
After mounting, cover the specimens with cellophane or other heavier transparent materials for display purposes. For filing of the specimens, 12x17 inches plant genus folders should be made. The genus folders usually are of moderately heavy manila plycard. One or more specimens may be placed in a genus folder and the plant names indicated on the outside of the folder. In most herbaria collections, specimens are poisoned to keep insects from destroying them. This is laborious and impractical for a small collection. An occasional treatment with paradichlorobenzene crystals or napthalene flakes (mothballs) usually will kill or repel insects and preserve your collection for many years.

Most biological supply houses sell collecting equipment, plant presses, dryers, mounting sheets and labels; but an ingenious worker can use local supplies and materials for considerably less expense.

Where to Send Rangeland Plants

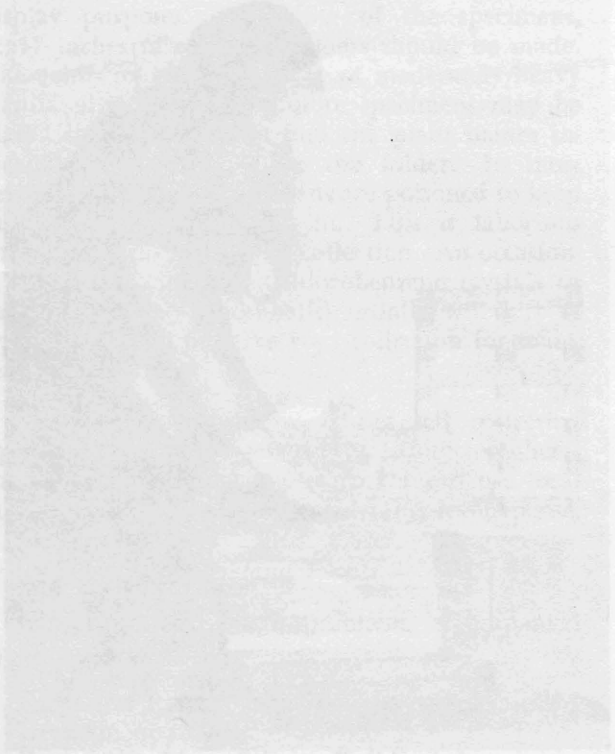
Mail rangeland plant specimens, accompanied by a complete D-853, to:

Extension Range Specialists
Department of Range Science
Room 202, Plant Science Building
Texas A&M University
College Station, Texas 77843



Secure a complete plant specimen—roots, stems, leaves and flower or seed head.

Place plant specimen in plant press to dry.



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