PLANT COLLECTING APPARATUS FOR TAXONOMIC AND ECOLOGICAL STUDIES

1. A LIGHTWEIGHT PLASTIC PLANT PRESS FOR ON-SITE SPECIMEN PRESSING

The advantages of pressing plant specimens on-site, while fresh, are: 1, a natural layout may be achieved that can often resemble the original plant habit; 2, the specimen forms a site record rather than a reconstruction of a site record; 3, fresh material is often easier to arrange than wilted material; 4, it increases sampling efficiency because only sufficient material to fill the required number of herbarium sheets need be collected, and 5, it reduces information loss through a reduction in specimen handling.

Factors which can inhibit on-site plant pressing include the difficulty in carrying plant presses in the field and pressing plant specimens in even moderate wind. The following is a description of an economical and portable plant press that can be used on-site, even in windy conditions.

A rectangular plastic bin, with stacking base design for rigidity, and dimensions of 490 × 260 × 240 mm forms the basic unit. These are available commercially. The sides can be cut to a convenient depth. A depth of 115 mm provided a reasonable compromise between bulkiness and capacity. Four slots are cut in the angle between the base and the long side as illustrated in Figure 1, for press strap insertion. The two press straps are each 25 × 1 300 mm nylon straps with double D-rings on one end. The straps can be secured to the bottom of the bin by rivets so that the D-ring side of the strap is slightly longer than the bin

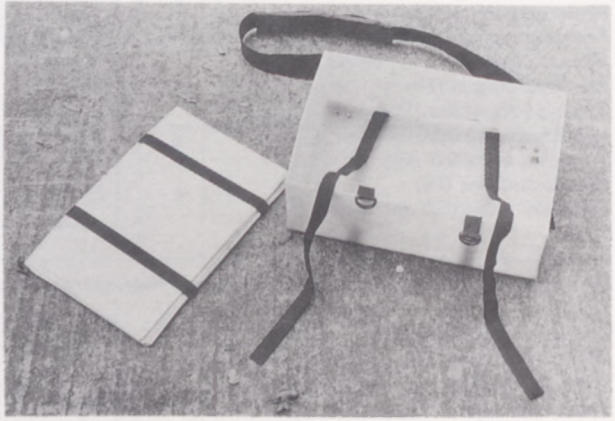

FIGURE 1.—Portable press with shoulder strap showing strap layout and spare specimen folders secured inside lid.

FIGURE 2.—Portable press mounted on rucksack frame with additional pockets for equipment.

depth. Figure 1 shows the inside of the plant press with press straps and shoulder strap which is attached to the bottom of the bin by rivets.

The lid which is also available commercially is cut to fit snugly inside the press. A nylon strap can be riveted to one face of the lid to form a handle. Two loops of elasticized straps of 25 mm width are riveted to the lid for holding spare specimen folders on the face opposite to that with the handle (Figure 1).

In use, folders are numbered prior to pressing, while still held down by the elasticized straps as the lid also forms a good writing surface. If the end of the press strap is looped before threading through the second D-ring then the free end becomes a quick-release device to facilitate press opening. The press can be used either with a shoulder strap (Figure 1) or it can be mounted on a rucksack frame (Figure 2). The former is often more suitable for ecological studies where an abundance of equipment often necessitates a separate rucksack.

The portable press is not suitable for drying specimens, therefore drying paper is not required. Specimens should be transferred to drying presses with drying paper inserted between each folder as soon as possible. The portable press protects specimens from moist vegetation and light rain. The press sides afford protection from wind when laying out specimens and clothes pegs can be used to keep folder covers open, if necessary. The sides also ensure that the specimens are not subjected to undue shifting such as is often experienced when loading and aligning standard presses. Pressing of fresh material before transfer to a standard drying press also facilitates alignment of specimen folders.

Use of a portable press should improve the quality and information content of plant specimens.

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M.D. PANAGOS* and R.H. WESTFALL*

*Botanical Research Institute, Department of Agriculture and Water Supply, Private Bag X101, Pretoria 0001.

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