

Portable Shelter for Field Crossing

By Thomas Conlon¹

Wheat breeding at the Dickinson, North Dakota, Experiment Station has been difficult in many past years because of windy weather during the time this work is being done. No greenhouse facilities are available there and all wheat crossing is done in the field.

To overcome difficulties encountered in crossing wheat in the field during windy weather, a portable shelter has been devised by station personnel, the use of which permits breeding work to proceed unhampered by the wind.

Three feet wide, four feet long and four and one-half feet high, and equipped with a set of wheels, the device can easily be rolled from place to place by one man, and is light enough to be carried by two men.

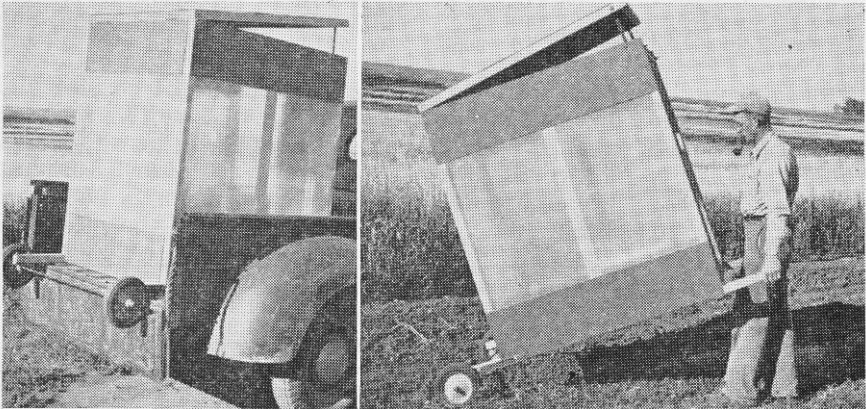


Fig. 1. Left, loaded into the pickup truck, the shelter is brought to the field. Right, it is wheeled like a wheelbarrow to the site of work.

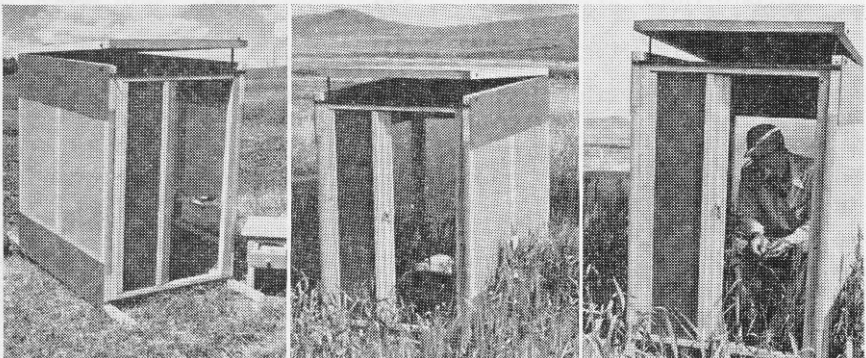


Fig. 2. Left, the shelter is set down in the field. Note elevated roof, which can be raised and lowered at will. Also the sliding door and (inside) the work tray on a swinging arm. The little stool is covered with a sponge rubber cushion and contains a small drawer for storing working materials. Center, the shelter is set over the row on which work is to be done. Right, the author of this paper at work in the shelter.

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The two side panels and one end panel are fabricated separately from two by two inch lumber framework covered with presdwood and celloglass. The side panels are fastened to the end panel by two sets of four inch door hinges placed on the inside. The roof is built of two by two inch lumber framework covered with presdwood and is also hinged to the end panel. This arrangement makes it possible to raise the roof for ventilation in moderately windy periods. The telescoping presdwood door opens from either side, and is conveniently out of the way when not needed.

The device is easily taken apart for storage, after crossing has been completed for the season, by simply knocking out the hinge pins. The separate panels can then be stacked one on top of the other and stored in a relatively small space.

Incidental to providing shelter from the wind, the shelter offers protection from the sun and also from mosquitoes, which are very troublesome in some years. The more comfortable working conditions resulting from the use of this shelter makes possible more rapid and uninterrupted work, four times as many crosses being completed in 1950, the first year the shelter was used, as were made in 1949.

To make the most effective use of this device, a separate "breeding nursery" of lines scheduled for the current crossing projects was seeded, with sufficient room being left around this planting to permit one man to wheel the shelter from row to row and place it where desired.

Constructed at a cost of about \$25, the device has more than paid for itself in one season in time saved by its use.

Utilization of Iris moss is described in Economic Botany (Oct.-Dec. '49). This is not a moss but a red alga. Starting as a small industry on the European coast, this material now is processed by five American companies from harvest along the New England and Nova Scotia coast. The product is a hydrocolloid which is widely used in ice cream, pie fillings, and icings. Another article in the same magazine is on the production of citric acid by culture of fungi, especially by species of *Aspergillus*. Still other articles are on pineapple culture (well illustrated), improvement in turpentine practices and fiber flax in Oregon. One with perhaps more romantic appeal is on problems of securing plant products from the tropics.—NDAC Botany News Letter.

An outstanding event in plant books was the publication last year of a second edition of Bailey's "Manual of Cultivated Plants." This contains descriptions of over 5,000 species, an increase of about 50 per cent over the old edition. Some groups are little changed, others very much. The species of *Dianthus* are increased from 10-29; *Iris* 16-60; *Sedum* 26-58. The old illustrations were discarded and replaced with others so that each family has one or more groups of figures. Incidentally Dr. Bailey passed his 92nd birthday on March 15. He has been one of America's outstanding men in horticulture, agriculture and botany in the widest sense.—NDAC Botany News Letter.