eradication should also be practiced, otherwise the remaining plants will go to seed and reinfest the area. Furthermore, on account of the seeding habit, the hand pulling during early September should be repeated several years in order to destroy the plants that originate from seeds that have remained dormant in the soil for two or more years.

RECENT INDIANA WEEDS, 1926[1]

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The present paper is a continuation of a series of contributions, started in 1922, which attempts to record the occurrence in Indiana of plants new to the state, particularly species with weedy habits. Established plants that have recently exhibited troublesome tendencies are also considered. The growing season of 1926 is the basis of the following record. In each case, the identification was verified by the United States Department of Agriculture, the New York Botanical Garden, or the Gray Herbarium of Harvard University. Specimens have been deposited in the herbarium of Purdue University Agricultural Experiment Station.

Field Peppergrass.—*Lepidium campestre* (L.) R. Br. Although not included in Coulter's catalogue of Indiana plants, this species is at present so widespread that it probably occurs in every county in the state and has recently taken rank as one of the worst weeds of meadows, pastures and grain crops. The wide distribution of the plant is probably due to the use of impure clover, timothy and alfalfa seed. Field peppergrass is an exceedingly troublesome and persistent plant that is difficult to eradicate under Indiana conditions.

Creeping Yellow Water Cress.—*Radicula sylvestris* (L.) Druce. A native of Eurasia with perennial roots and creeping stems from which new plants arise in abundance. Specimens in full flower were collected in a pasture field and along fencerows near Elwood. Palmer J. Davis, vocational instructor at Elwood High School, states that the plant is causing some alarm among farmers in the vicinity due to its persistence and the habit of reproducing from the creeping stems. Prefers moist ground. The identification was confirmed by S. F. Blake of the U. S. Department of Agriculture.

Squaw-weed.—*Senecio obovatus* Muhl. Found in Montgomery County, notably on the J. F. Dice farm, R. 1, Crawfordsville. Mr. Dice states that the species has recently appeared in his locality and it spreads rapidly, the young plants forming a solid mat on the ground. On the Dice farm a hillside in bluegrass pasture is thoroughly infested with the squaw-weed. The identification was verified by Percy Wilson of the New York Botanical Garden.

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[1] Contribution from the Department of Botany, Purdue University Agricultural Experiment Station.

Little Barley.—*Hordeum pusillum* Nutt. This species, although not recorded in Coulter's Catalogue of Indiana plants, is becoming exceedingly abundant in southwestern Indiana, particularly in Vanderburgh Posey, Warrick and Gibson counties. The identification of a specimen collected in dry soil along a roadside near Evansville in Vanderburgh County was verified by B. L. Robinson of the Gray Herbarium. Little barley occasionally becomes a troublesome weed in alfalfa fields.

Dove's foot Crane's-bill.—*Geranium molle* L. Established along roadside near Battle Ground, where specimens in full flower were collected on May 26, 1926. Identification confirmed by J. K. Small, New York Botanical Garden.

Red Orache.—*Atriplex rosea* L. Although widely distributed over the United States, no previous report of its occurrence in Indiana can be found. A common weed in Porter County where on the S. C. Hardesty farm near Hobart it is a serious pest, particularly in alfalfa, and is spreading rapidly. It was probably introduced by means of impure alfalfa seed. Identification confirmed by Ivan M. Johnston of the Gray Herbarium.

Halberd-leaved Orache.—*Atriplex hastata* L. A common species in the vicinity of Lafayette. Thrives in vacant lots, along roadsides and in waste places generally. It has also been observed in Lake and Porter counties, where no specimens were collected.

Miscellaneous.—Millet, *Panicum miliaceum* L., cultivated in Europe as a food plant and to some extent in America for forage, is established in Fulton County where it grows in fields and along fencerows. The identification was confirmed by P. L. Ricker of the U. S. Department of Agriculture.

A giant form of *Setaria viridis* (L.) Beauv. was found growing freely in fields in Hancock County. The plant was at first thought to be the cultivated foxtail millet, *S. italica* Beauv., but A. S. Hitchcock referred the species to *S. viridis*. He states that he has found the same large form growing in China.

Burweed Marsh Elder, *Iva xanthiifolia* Nutt., grows along ditch banks in Tippecanoe County. A specimen in early flower was collected on July 19, 1926.

Spotted Knapweed, *Centaurea maculosa* Lam., occurs as a weed near Atlanta.

A patch of hoary cress, *Lepidium draba* L., which is about an acre in extent and which has persisted for several years, occurs on the Grant Thomas farm near Milroy.

Near Anderson there is an infestation of a plant that appears to be a wild form of the common garden lettuce, *Lactuca sativa* L. On one farm where the plant infests about five acres of land and is very thick in places, the farmer considers it a bad weed.