

RECENT INDIANA WEEDS, 1927.¹

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In this paper is recorded the occurrence in Indiana of plants known to possess weedy characteristics and which are new in the state or else have recently developed troublesome tendencies. It covers the period from October 1, 1926, to October 1, 1927, and is a continuation of previously published papers on the same subject.

For assistance in verifying identification, thanks are due the Division of Economic and Systematic Botany of the United States Department of Agriculture. Specimens of the plants listed have been deposited in the herbarium of the Purdue University Agricultural Experiment Station.

Cultivated Garlic (*Allium sativum* L.). In the vicinity of Madison a number of farms, gardens, and a cemetery are infested with the escaped form of the cultivated garlic, believed to be descendents of garlic that was formerly extensively cultivated in gardens. In common with its relative *A. vineale* L., the wild form of the cultivated garlic possesses bulbs that break into bulblets, varying in number from 6 to 20 or more, each of which is capable of forming a new plant the following season. Tests conducted in a cemetery near Madison indicate that the plant can be controlled by fall plowing in such a manner as to bury the tops and expose the bulbs to frost, the process requiring three years for complete success. The wild form of the cultivated garlic is a taller, ranker growing species than either *A. vineale* L. or *A. canadense* L., both commonly called wild garlic or wild onion, and possesses broader, flattened leaves.

Beefsteak Plant.—(*Perilla frutescens* (L.) Britton). On a number of farms in Indiana, particularly in Bartholomew County, the beefsteak plant is a serious weed, seeming to thrive equally well in open pastures and in wooded areas, where all forms of livestock seem to leave it untouched. It is an annual, a member of the mint family, growing to an average height of about three feet and is a native of India. Said to be an escape from garden cultivation, although on most farms where the species occurs in Indiana it seems to have been introduced through the medium of impure grain and clover seed.

Spanish Bayonet.—(*Yucca filamentosa* L.). Throughout the southern half of Indiana, notably in Monroe, Morgan and Daviess counties, the Spanish bayonet or Adam's needle escapes from cultivation, particularly in cemeteries, when allowed to go to seed and becomes an exceedingly difficult plant to eradicate. When cut before seeds ripen, the

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plant stays well within its bounds. Seems to prefer sandy soil but will persist almost anywhere once the seedlings are allowed to form.

Blueweed.—(*Echium vulgare* L.). A common eastern species described by Coulter as "sparingly found in the northern part of the state," has developed into a very troublesome weed in the vicinity of Lagrange where it covers many acres on a number of farms, particularly on pasture land, and is difficult to combat. Specimens were collected in full flower on June 29, 1927.

Leafy Spurge.—(*Euphorbia esula* L.). A species equipped with deep-seated, heavy perennial rootstocks that seems to be capable of becoming a serious farm pest although not as yet troublesome in Indiana. In Orange County, New York, the leafy spurge is a major weed problem. Specimens in full flower were collected near Winamac, where it is established along roadsides, on June 20, 1927.

Purple-Head Sneezeweed.—(*Helenium nudiflorum*, Nutt.). Usually described as growing in moist places and said to be infrequent in Indiana, this species is a troublesome farm weed in Daviess County on dry, barren hillsides. It begins to bloom during late July and dies down during early October. No stock will touch it.

Meadow Barley (*Hordeum nodosum* L.). A species that can readily be confused with *H. pusillum* Nutt., found growing abundantly in Vanderburgh County during July and probably prevalent elsewhere in the state. A specimen was critically examined by C. C. Deam and pronounced genuine *H. nodosum*.