

VALUE OF FERTILIZING CONSTITUENTS OF WEEDS OF INDIANA.
ANALYSIS OF IRONWEEDS.

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This paper is the beginning of work to determine the value of weeds. Ironweeds, which grow everywhere in great abundance, were selected for analysis. Samples were collected from the university campus on September 29, 1911. They were cut into small pieces and dried for several days in the air. Finally the material was dried for several hours at about 90°. The analysis was made upon this dried sample, but the results were calculated to the air dried material. The loss on drying was 14 per cent. The analyses¹ of several other substances are given in this table for comparison.

	PER CENT OF			Value per Ton.*
	Nitrogen.	Phosphoric Acid.	Potash.	
Ironweeds.....	1.29	0.66	0.95	} \$6 50
	1.28	0.63	0.98	
Blue grass.....	1.19	0.40	1.57	6 65
Oxeye daisy.....	0.28	0.44	1.25	3 28
Wheat straw.....	0.59	0.12	0.51	2 87
Foxtail.....	1.54	0.44	1.99	8 45
Corn stover (fodder).....	1.04	0.29	1.40	5 76
Timothy hay.....	1.26	0.53	0.90	6 24
Red top.....	1.15	0.36	1.02	4 14
Red clover.....	2.07	0.38	2.20	10 54

*The values used for N, P₂O₅ and K₂O are 18, 6 and 6 cents per pound respectively.

These calculations do not consider the value of the organic matter, which is really the thing of greatest importance in manures and soiling crops. The values assigned represent the cost of a commercial fertilizer containing the same amounts of nitrogen, phosphoric acid and potash.

¹ Yearbook of the U. S. Dept. of Agriculture, 20: 611 (1896).

The object of this work is to point out the value of weeds and to call attention to the possibilities of utilizing these waste products for increasing the fertility of the soil. Many tons of ironweeds grow each summer in the pasture fields of the State. In some cases the weeds are cut but are not used in any way. The cost of cutting, raking, hauling and scattering these weeds upon some field under cultivation would be only a small part of their value. If there were a market for ironweeds at say \$2.50 per ton, farmers would harvest the entire crop. Then why are the ironweeds not used by the farmer himself, since they are worth \$6.50 to him? The value of clover as a fertilizing material is recognized by everyone, but ironweeds, which are worth 60 per cent. as much as clover, are never considered of any value whatever.

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