

SCIENCE:

A WEEKLY NEWSPAPER OF ALL THE ARTS AND SCIENCES.

PUBLISHED BY

N. D. C. HODGES,

874 BROADWAY, NEW YORK.

SUBSCRIPTIONS.—United States and Canada.....\$3.50 a year.

Great Britain and Europe..... 4.50 a year.

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WEEDS AS FERTILIZING MATERIAL.

BY CHARLES FREDERICK MILLSPAUGH.

WE have initiated a number of experiments at this station with a view of determining the actual average value of composted weeds as manurial substances upon the basis of the commercial value of their mineral constituents. For this purpose about fifty weeds have so far been gathered in the same manner and at the same time that the farmer should so gather them for compost. Our chemist, Dr. de Roode, finds that each has a certain value according to its species, yielding nitrogen, phosphoric acid, and potash, as seen in the following table, from which we have computed the money values according to the commercial value of the minerals at this place.

| Name. | Nitrogen. | Phos. ac. | Potash. | Value. |
|--|-----------|--------------|---------|---------|
| Poke-weed, <i>Phytolacca decandra</i> , L. | 3.34 | .65 | 8.00 | \$21.93 |
| Bitter Dock, <i>Rumex obtusifolius</i> , L. | 2.94 | .50 | 4.29 | 16.26 |
| Common Thistle, <i>Cnicus lanceolatus</i> (L.), Willd. | 2.44 | .62 | 5.53 | 15.79 |
| Crow-foot Grass, <i>Panicum sanguinale</i> , L. | 1.89 | .90 | 4.67 | 13.39 |
| Sheep Sorrel, <i>Oxalis corniculata</i> v. <i>stricta</i> . (L.), Sav. | 2.04 | .61 | 3.02 | 12.74 |
| Fox-tail Grass, <i>Setaria glauca</i> (L.), Beauv. | 1.77 | .75 | 4.52 | 12.41 |
| Pleurisy-weed, <i>Asclepias tuberosa</i> , L. | 2.02 | .86 | 3.31 | 12.35 |
| Sweet Clover, Bokhara Clover, <i>Melilotus alba</i> , L. | 2.40 | .50 | 1.95 | 11.87 |

| | | | | |
|--|------|-----|------|-------|
| Burdock, <i>Arctium lappa</i> , L. | 1.85 | .96 | 3.07 | 11.69 |
| Ox-eye Daisy, <i>Chrysanthemum leucanthemum</i> , L. | 2.12 | .46 | 2.88 | 11.66 |
| Horse-weed, Wild Lettuce, <i>Lactuca canadensis</i> , L. | 1.07 | .47 | 2.20 | 11.53 |
| Wild Carrot, <i>Daucus carota</i> , L. | 1.65 | .62 | 4.21 | 11.47 |
| Butter-weed, <i>Lactuca leucophæa</i> (Willd.), Gray. | 2.06 | .52 | 2.89 | 11.44 |
| Deer-tongue Grass, <i>Panicum clandestinum</i> , L. | 1.95 | .76 | 2.90 | 11.44 |
| Blue Thistle, <i>Echium vulgare</i> , L. | 1.45 | .80 | 4.56 | 11.35 |
| Iron-weed, <i>Vernonia noveboracensis</i> (L.), Willd. | 2.07 | .42 | 2.11 | 10.63 |
| Clot-bur, <i>Xanthium strumarium</i> , L. | 1.51 | .73 | 3.45 | 10.43 |
| Climbing Buckwheat, <i>Polygonum dumetorum</i> , scan- dens (L.), Gray. | 1.93 | .40 | 2.31 | 10.38 |
| Yarrow, <i>Achillea millefolium</i> , L. | 1.71 | .50 | 2.98 | 10.28 |
| Wild Flax, Toad Flax, <i>Linaria vulgaris</i> , Mill. | 1.83 | .64 | 2.30 | 10.27 |
| Lobelia, Indian Tobacco, <i>Lobelia inflata</i> , L. | 1.79 | .65 | 2.35 | 10.11 |
| Stickweed, White Devil, <i>Aster lateriflorus</i> (L.), Britt. | 1.92 | .56 | 1.61 | 9.80 |
| Briars, <i>Rubus villosus</i> , Ait. | 1.51 | .32 | .74 | 9.68 |
| Wing-Stem, <i>Actinomeris alternifolia</i> (L.), D.C. | 1.40 | .94 | 2.73 | 9.55 |
| Old White-top, Velvet-grass, <i>Holcus lanatus</i> , L. | 1.30 | .45 | 3.72 | 9.38 |
| Boneset, <i>Eupatorium perfoliatum</i> , L. | 1.70 | .53 | 1.94 | 9.23 |
| Timothy, <i>Phleum pratense</i> , L. | 1.48 | .63 | 2.65 | 9.21 |
| Milk-Weed, Wild Cotton, <i>Asclepias Syriaca</i> , L. | 1.71 | .93 | .78 | 8.77 |
| Blue Devil, <i>Aster cordifolius</i> , v. <i>laeviagatus</i> , Porter | 1.49 | .52 | 2.25 | 8.74 |
| Wild Coreopsis, <i>Coreopsis tripteris</i> , L. | 1.56 | .48 | 1.54 | 8.22 |
| Nail-rod, Stick-Weed, <i>Aster lateriflorus</i> , var. <i>hirsuti-</i> <i>caulis</i> , Gr. | 1.47 | .49 | 1.83 | 8.20 |
| Wire-grass, <i>Eatonia Pennsylvanica</i> (Spr.) Gray | 1.32 | .52 | 2.26 | 8.10 |
| Red-top, <i>Agrostis alba</i> , var. <i>vulgaris</i> (With.) Thurb. | 1.39 | .40 | 2.10 | 8.02 |
| Quill-weed, Queen-of-Meadow, <i>Eupatorium purpureum</i> , L. | 1.41 | .36 | 1.81 | 7.83 |
| Canada Thistle, <i>Cnicus arvensis</i> (L.), Hoffm. | 2.06 | .45 | 2.74 | 7.58 |
| Sorrel, <i>Rumex acetosella</i> , L. | 1.38 | .21 | 1.89 | 7.47 |