

**CONNECTICUT AGRICULTURAL EXPERIMENT STATION.**

*Bulletin No. 59, May 5, 1881.*

**FERTILIZER ANALYSES.**

**POTASH SALTS.**

- 571 German potash salts. Imported by Rafferty & Williams, New York, sold by F. Ellsworth, Hartford.  
 595 Muriate of Potash, imported and sold by Mapes F. & D. G Co., Hart ford.

|                               |                  |           |
|-------------------------------|------------------|-----------|
|                               | 571              | 595       |
| Potash, .....                 | 12 51            | 51 21     |
| Chlorine, .....               | 27 23            |           |
| Equiv. sulphate potash, ..... | 23 20            |           |
| Equiv. muriate potash, .....  |                  | 81 11     |
| Selling price, ...            | \$2 per 200 lbs. | \$42 ton. |
| Cost 100 lbs potash.          | \$8 00           | \$4 10    |

The "potash salts" contain a good deal of sulphate of magnesia and common salt and may, now and then, have a fertilizing value beyond supplying potash. This grade of potash salts wholesales now at \$7.25

579 is evidently cotton seed ground with the almost worthless *hulls*. Decorticated cotton seed meal contains nearly twice as much nitrogen, etc., and is worth about twice as much.

**SUPERPHOSPHATES.**

- 557 "Bone Phosphate," made and sent to Station by David Dickinson, Middle Haddam.  
 577 The same. Sent by H. L. Stewart, Middle Haddam.  
 558 "Ammoniated Bone Phosphate." made and sent to Station by David Dickinson, Middle Haddam.  
 576 The same. Sent by H. L. Stewart, Middle Haddam.  
 581 "Phosphate," made and sent to Station by Geo. H. Harris & Son, Eagleville.  
 578 "English Phosphate," imported by H. J. Baker & Bro., New York, and sold by Wilson & Burr, Middletown, Ct. Sent to Station by J. M. Hubbard, Middletown.

per ton.

BONE.

582 Bone, No. 1.

583 Bone, No. 2.

Manufactured and sent by G. H. Harris & Son, Eagleville, Ct.  
584 Strictly Pure Ground Bone, made by G. B. Forrester, 188 Pearl St., New York, sold by S. B. Wakeman, Saugatuck.

585 Peter Cooper's Pure Bone, sold by Simon Banks, Southport, Ct.

The last two samples were taken and sent to Station by G. P. Jennings, Greens Farms, Ct.

MECHANICAL ANALYSIS.

|                         | 582 | 583 | 584 | 585 |
|-------------------------|-----|-----|-----|-----|
| Fine, smaller 1-50 in   | 2   | 3   | 16  | 51  |
| Fine medium, " 1-25 in  | 2   | 8   | 14  | 15  |
| Medium, " 1-12 in       | 8   | 17  | 26  | 13  |
| Coarse-medium, " 1-6 in | 34  | 27  | 34  | 15  |
| Coarse, larger 1-6 in   | 54  | 45  | 0   | 6   |
|                         | 100 | 100 | 100 | 100 |

CHEMICAL ANALYSIS AND VALUATION.

|                     | 582     | 583     | 584     | 585      |
|---------------------|---------|---------|---------|----------|
| Nitrogen,           | 4 05    | 3 66    | 4 18    | 1 40     |
| Phosphoric acid     | 21 88   | 17 74   | 21 80   | 9 92     |
| Cost in market, ton | \$28 00 | \$24 00 | \$34 04 | \$35 00* |
| Estimated value,    | 28 33   | 28 00   | 34 50   | 36 48    |

\*—In Southport on trial, \$33 in New York.

Sample 583 was rather moist (12 per cent. water) which reduces its value somewhat.

585 has had a good share of the gelatine extracted, hence is poorer in nitrogen and richer in phosphoric acid than raw bone.

COTTON AND CASTOR SEED.

579 Cotton Seed Meal, made by B. G. Stanton, New London, sold by Coles & Weeks, Middletown. Sampled and sent by J. M. Hubbard.

580 Castor Pomace, sold by Wilson & Burr, Middletown. Sampled by J. M. Hubbard.

ANALYSES.

|                       | 579     | 580     |
|-----------------------|---------|---------|
| Nitrogen,.....        | 3 56    | 6 01    |
| Phos. Acid,.....      | 1 70    | 1 70    |
| Potash,.....          | 1 57    | 1 20    |
| Selling price,.....   | \$30 00 | \$21 00 |
| Estimated value,..... | \$14 84 | \$22 25 |

ANALYSES.

|                         |         |         |         |         |
|-------------------------|---------|---------|---------|---------|
| Nitrogen.....           | 577     | 578     | 581     | 578     |
| Soluble phos. acid..... | 3 23    | 3 54    | 2 93    | 13 18   |
| Reverted " ".....       | 7 87    | 4 57    | 4 88    | 1 30    |
| Insoluble " ".....      | 7 92    | 8 88    | 7 07    | 0 90    |
| Potash.....             | 3 11    | 4 73    | 2 72    |         |
| Chlorine.....           | 0 15    |         |         |         |
| Estimated value per ton | \$50 71 | \$46 61 | \$44 92 | \$36 97 |
| Cost per ton.....       | \$40 00 | \$40 00 | \$40 00 | \$38 00 |

SOAP BOILERS' REFUSE.

- 573 Scraps from rendering vat.
- 575 Liquid from rendering vat.
- 574 Lye from condenser.

The above sent to Station by A. A. Hills, Greenville.

ANALYSES.

|                              | 573    | 575    | 574    |
|------------------------------|--------|--------|--------|
| Nitrogen.....                | 2 25   | 1 07   |        |
| Phos. acid.....              | 0 51   | 0 22   |        |
| Potash.....                  |        |        | 2 40   |
| Estimated value per ton..... | \$7 81 | \$4 83 | \$2 16 |

The ton of 575 and 574 equals about 230 gallons or 7 1-3 bbls.

S. W. JOHNSON, Director.

The above Bulletin should have appeared last week but the manuscript was lost in the mail.