

Table 3. Effects of different rates of compost on potato tuber number, size, and quality, San Luis Valley, Colorado, 2002

| Field | Treatment ^a | Percent ^b | | | | | | | | Total lbs. | Total no. | Cwt/A ^d |
|--------------|------------------------|----------------------|---------|----------|------|----------|------|-----------------|-----|------------|-----------|--------------------|
| | | < 4 oz. | No. | 4-10 oz. | No. | > 10 oz. | No. | MS ^c | No. | | | |
| 6A | 0 | 14.0 | 35.6 | 34.8 | 34.6 | 48.5 | 26.6 | 2.8 | 3.2 | 51.5 a | 115.0 | 528.4 a |
| | 4 | 11.4 | 31.5 | 33.6 | 35.6 | 51.3 | 29.6 | 3.7 | 3.3 | 49.5 a | 106.0 | 507.2 a |
| | 8 | 9.6 | 27.6 | 36.2 | 40.0 | 49.8 | 29.3 | 4.5 | 3.2 | 50.3 a | 101.3 | 515.6 a |
| | 12 | 7.4 | 23.0 | 27.9 | 34.8 | 60.7 | 39.3 | 4.0 | 3.0 | 45.4 b | 90.3 | 465.5 b |
| 6B | 0 | 8.9 | 30.5 | 36.7 | 39.0 | 48.2 | 25.8 | 6.2 | 4.8 | 54.8 | 130.5 | 562.4 |
| | 4 | 5.4 | 23.8 | 31.0 | 38.0 | 56.0 | 32.3 | 7.6 | 6.0 | 56.6 | 112.0 | 579.7 |
| | 8 | 5.3 | 24.2 | 37.2 | 40.1 | 52.7 | 30.7 | 4.8 | 4.9 | 54.1 | 112.3 | 554.7 |
| | 12 | 5.4 | 19.6 | 36.0 | 44.8 | 53.2 | 30.5 | 5.5 | 5.1 | 51.8 | 100.0 | 531.0 |
| Overall mean | 0 | 11.4 a | 33.0 a | 35.7 | 36.8 | 48.3 | 26.2 | 4.5 | 4.0 | 53.2 a | 122.8 a | 545.4 a |
| | 4 | 8.4 ab | 27.7 ab | 32.3 | 36.8 | 53.7 | 31.0 | 5.6 | 4.6 | 53.0 a | 109.0 ab | 543.5 a |
| | 8 | 7.4 b | 25.9 b | 36.7 | 40.1 | 51.2 | 30.0 | 4.7 | 4.0 | 52.2 a | 106.8 b | 535.1 a |
| | 12 | 6.4 b | 21.3 b | 31.9 | 39.8 | 56.9 | 34.9 | 4.8 | 4.0 | 48.6 b | 95.1 b | 498.3 b |
| LSD(P=0.05) | | 3.20 | 6.77 | NS | NS | NS | NS | NS | NS | 3.19 | 15.41 | 32.69 |

^a Rate of compost applied in tons/acre.

^b Based on tuber weight in pounds and tuber number, mean of four replications.

^c Misshaped tubers.

^d Total yield expressed as hundred weight per acre, 1-15 foot row per treatment per replication, mean of four replications.

Means followed by the same letter are not significantly different at P=0.05.