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## Yields of the Field Experiments 1961

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### 61/W/DH/2 Lucerne - Control of Weeds - Simazine and Row Spacing

#### Rothamsted Research

Rothamsted Research (1962) *61/W/DH/2 Lucerne - Control of Weeds - Simazine and Row Spacing* ; Yields Of The Field Experiments 1961, pp 137 - 139 - DOI:

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61/Dh/1.1

LUCERNE

Control of weeds by simazine and row spacing - Woburn Mill Dam Close  
1961.

Design: 2 replicates of 12 treatments arranged in one randomised block. \*

Area of each plot: 0.0082 acres. Area harvested: 0.0046 acres.

Treatments. All combinations of:

Row spacing: 7 inches; 14 inches.

Method of control: None (0); mechanically cultivated (M);

Simazine  $1\frac{1}{2}$ ; 3 lb active ingredient per acre each applied either  
in spring ( $1\frac{1}{2}$  E; 3 E) or  $\frac{3}{4}$  lb in spring ( $\frac{3}{4}$  E).

Basal dressing: 4 cwt per acre compound fertiliser (14%  $P_2O_5$ , 28%  $K_2O$ ).

Cultivations, etc.: Harrowed: June 28 and July 20, 1960. Seed  
drilled at 20 lb per acre: Aug 11. Sprayed with diquat at  $2\frac{1}{2}$   
pints in 80 gallons per acre: Dec 17. Basal fertiliser applied:  
Mar 6, 1961. Simazine sprays applied: Mar 28 and Sept 19. Cut  
three times: June 13, July 25, Sept 8. Variety: Du Fuits.  
Previous crop: Kale.

\*Originally 2 randomised blocks of 20 plots each, but some plots were  
abandoned owing to mole and bird damage.

Standard error per plot. Dry matter cwt per acre:

|                  |                                       |
|------------------|---------------------------------------|
| 1st cut:         | 9.78 cwt per acre or 28.5% (14 d.f.)  |
| 2nd cut:         | 9.01 cwt per acre or 30.8% (14 d.f.)  |
| 3rd cut:         | 4.51 cwt per acre or 14.3% (14 d.f.)  |
| Total of 3 cuts: | 19.36 cwt per acre or 20.4% (14 d.f.) |



Summary of Results

Dry matter: cwt per acre

| Row spacing:<br>inches | Method of control |       |                   |                 |                 | Mean            |
|------------------------|-------------------|-------|-------------------|-----------------|-----------------|-----------------|
|                        | 0                 | M     | 1 $\frac{1}{2}$ E | 3E              | $\frac{3}{4}$ E |                 |
| <u>1st cut</u>         |                   |       |                   |                 |                 |                 |
|                        | (±6.91)           |       | (±4.89)           |                 | (±6.91)         |                 |
| 7                      | 46.9              | 38.3  | 33.4              | 22.9            | 46.6            | 36.9            |
| 14                     | 35.3              | 43.5  | 26.4              | 26.0            | 32.4            | 31.7            |
| Mean                   | 41.1<br>(±4.89)   | 40.9  | 29.9<br>(±3.46)   | 24.5<br>(±4.89) | 39.5            | 34.3            |
| Diff.                  | -11.6<br>(±9.78)  | +5.2  | -7.0<br>(±6.91)   | +3.1<br>(±9.78) | -14.2           | -5.2<br>(±3.99) |
| <u>2nd cut</u>         |                   |       |                   |                 |                 |                 |
|                        | (±6.37)           |       | (±4.51)           |                 | (±6.37)         |                 |
| 7                      | 33.1              | 22.8  | 31.4              | 21.3            | 39.1            | 29.9            |
| 14                     | 28.7              | 33.7  | 27.4              | 26.5            | 28.7            | 28.7            |
| Mean                   | 30.9<br>(±4.51)   | 28.3  | 29.4<br>(±3.19)   | 23.9<br>(±4.51) | 33.9            | 29.3            |
| Diff.                  | -4.4<br>(±9.01)   | +10.9 | -4.0<br>(±6.37)   | +5.2<br>(±9.01) | -10.4           | -1.2<br>(±3.68) |

Mean dry matter % as harvested:

1st cut: 23.1

2nd cut: 18.8

Method of control

0 = None

M = Mechanically cultivated

1 $\frac{1}{2}$ E;  $\frac{3}{4}$ E = Simazine 1 $\frac{1}{2}$  lb; 3 lb active ingredient per acre applied  $\frac{3}{4}$  in spring

1 $\frac{1}{2}$ EL = ~~Simazine 1 $\frac{1}{2}$  lb active ingredient per acre applied half in spring half in autumn 1961.~~



61/Dh/1.3

Dry matter: cwt per acre

| Row spacing:<br>inches | Method of control |      |                   |                 |                 | Mean            |
|------------------------|-------------------|------|-------------------|-----------------|-----------------|-----------------|
|                        | 0                 | M    | 1 $\frac{1}{2}$ E | 3E              | $\frac{3}{4}$ E |                 |
| <u>3rd cut</u>         |                   |      |                   |                 |                 |                 |
|                        | (±3.19)           |      | (±2.26)           |                 | (±3.19)         |                 |
| 7                      | 31.3              | 28.4 | 31.9              | 28.6            | 38.0            | 31.7            |
| 14                     | 29.4              | 35.4 | 31.3              | 28.4            | 31.5            | 31.2            |
| Mean                   | 30.4<br>(±2.26)   | 31.9 | 31.6<br>(±1.59)   | 28.5            | 34.8<br>(±2.26) | 31.5            |
| Diff.                  | -1.9<br>(±4.51)   | +7.0 | -0.6<br>(±3.19)   | -0.2<br>(±4.51) | -6.5            | -0.5<br>(±1.84) |

| <u>Total of 3 cuts</u> |                   |       |                   |                  |                  |                 |
|------------------------|-------------------|-------|-------------------|------------------|------------------|-----------------|
|                        | (±13.69)          |       | (±9.68)           |                  | (±13.69)         |                 |
| 7                      | 111.4             | 89.6  | 96.8              | 72.9             | 123.8            | 98.5            |
| 14                     | 93.4              | 112.6 | 85.1              | 81.0             | 92.7             | 91.6            |
| Mean                   | 102.4<br>(±9.68)  | 101.1 | 90.9<br>(±6.84)   | 76.9             | 108.2<br>(±9.68) | 95.1            |
| Diff.                  | -18.0<br>(±19.36) | +23.0 | -11.7<br>(±13.69) | +8.1<br>(±19.36) | -31.1            | -6.9<br>(±7.90) |

Mean dry matter % as harvested:

3rd cut: 19.6

Total of 3 cuts: 20.5

Method of control

0 = None

M = Mechanically cultivated

1 $\frac{1}{2}$ E;  $\frac{3}{4}$ E = Simazine 1 $\frac{1}{2}$  lb; 3 lb active ingredient per acre applied in spring 3/4 lb

~~1 $\frac{1}{2}$ E = Simazine 1 $\frac{1}{2}$  lb active ingredient per acre applied half in spring half in autumn 1961.~~