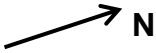
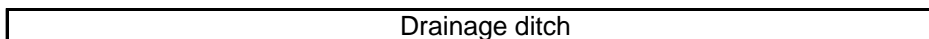
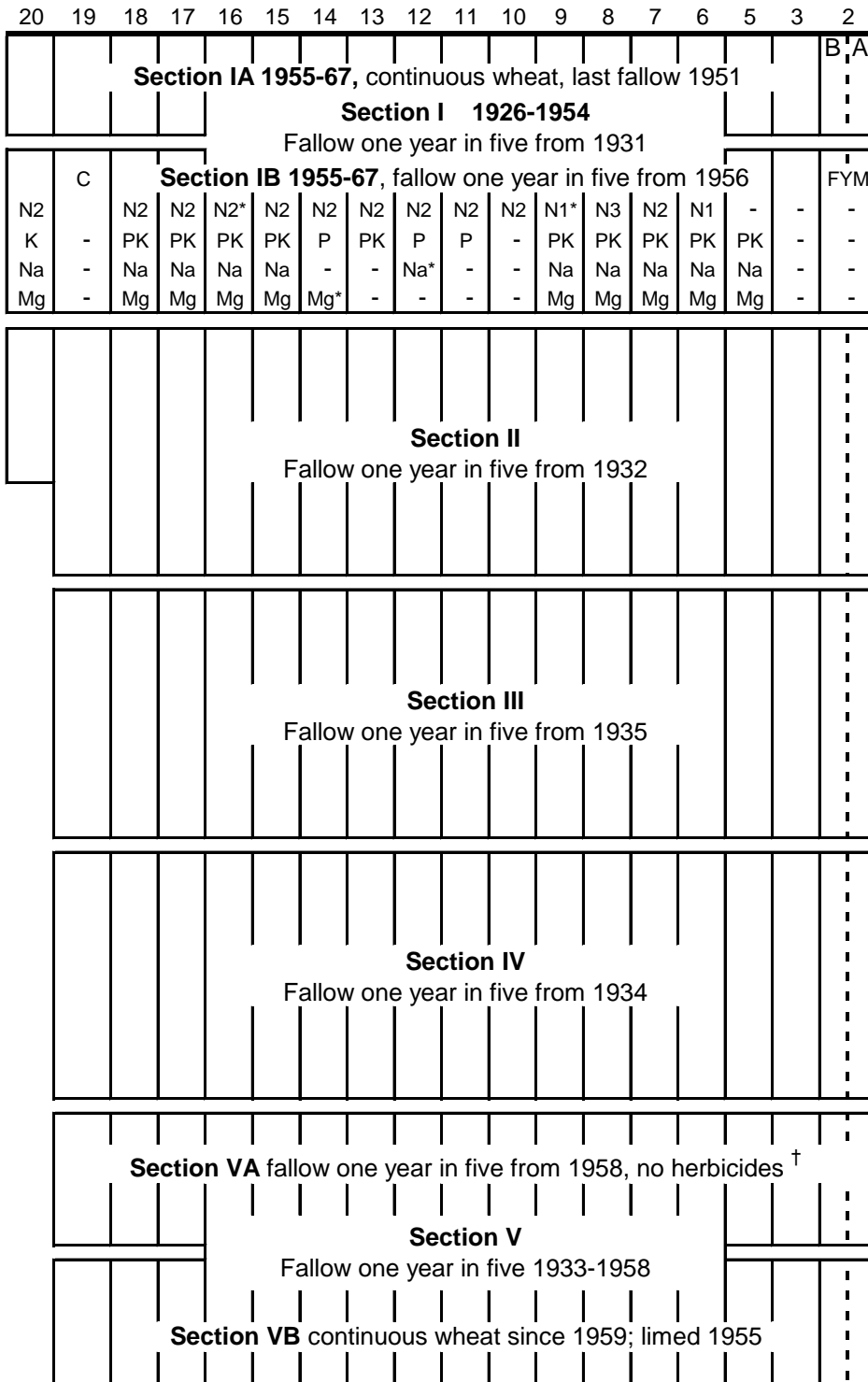


# BROADBALK PLAN 1926-1967



Strip



## Fertilizer, organic manure and herbicide treatments 1926-1967

### Strip Treatments applied each year (since 1852 unless shown otherwise)

- 2A FYM since 1885
  - 2B FYM
  - 3 No fertilizer or manure
  - 5 PKNaMg
  - 6 N1 PKNaMg
  - 7 N2 PKNaMg
  - 8 N3 PKNaMg
  - 9 N1\* PKNaMg since 1894; 9A and 9B received different treatments 1852-93
  - 10 N2
  - 11 N2 P
  - 12 N2 P Na\*
  - 13 N2 PK
  - 14 N2 P Mg\*
  - 15 N2 PKNaMg (timing of N application different to other plots, see below)
  - 16 N4 PKNaMg 1852-64; unmanured 1865-83; N2\*PKNaMg since 1884
- Plots 17 and 18 treatments alternate each year:
- 17 N2 applied in even years; PKNaMg applied in odd years
  - 18 N2 applied in odd years; PKNaMg applied in even years
  - 19 Rape cake and N1.5 P 1852-78: rape cake 1879-1940; castor bean meal since 1941
  - 20 N2 KNaMg since 1906, previously no manure or fertilizer

### Annual treatment per hectare:

FYM: Farmyard manure at 35t

C: Rape cake 1926-1940, supplying approx. 96kgN (N2).  
Castor bean meal 1941-1967, supplying approx. 96 kgN (N2)

P: 35 kgP as superphosphate

K: 90 kgK as potassium sulphate

Na: 16 kgNa as sodium sulphate

Na\* 57 kgNa as sodium sulphate

Mg: 11 kgMg as magnesium sulphate

Mg\* 31 kgMg as magnesium sulphate

### Nitrogen: Annual treatment per hectare

N1: 48 kgN as ammonium sulphate

N1.5 72 kgN as ammonium sulphate

N2: 96 kgN as ammonium sulphate

N3: 144 kgN as ammonium sulphate

N4: 192 kgN as ammonium sulphate

N1\*: 48 kgN as sodium nitrate

N2\*: 96 kgN as sodium nitrate

### Timing of Nitrogen applications:

Ammonium sulphate:

1852-72 All applied in autumn

1873-77 All applied in autumn, except plot 15 in spring

1878-83 All applied in spring, except plot 15 in autumn

1884-1967 24 kgN applied in autumn, remainder in spring (except plot 15 all in autumn)

Sodium nitrate:

1867-1967 All applied in spring, as one application 1867-98, as two equal amounts since 1899, applied from six days to six weeks apart

### <sup>†</sup>Herbicides applied:

Section 1A 1957 onwards; Section VB 1963 onwards; all other sections except VA have received herbicides since 1964

### Lime:

Section VB received a single application of lime in autumn 1954.

Lime has been applied intermittently since the 1950s as required.

### Sources of data:

Johnston & Garner (1969) Rothamsted Report for 1968, Part 2, pp12-25

Rothamsted Research (2006) 'Guide to the Classical and other Long-term Experiments'

Lawes Agricultural Trust, Harpenden, UK.

Please contact the e-RA Curators for further information