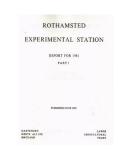
Thank you for using eradoc, a platform to publish electronic copies of the Rothamsted Documents. Your requested document has been scanned from original documents. If you find this document is not readible, or you suspect there are some problems, please let us know and we will correct that.



# Report for 1981 - Part 1



Full Table of Content

## **Conversion Factors**

#### **Rothamsted Research**

Rothamsted Research (1982) *Conversion Factors*; Report For 1981 - Part 1, pp 317 - 318 - DOI: https://doi.org/10.23637/ERADOC-1-128

CONVERSION PACTORS

## CONVERSION FACTORS (m) or lead 1

#### Factors for the Conversion of Imperial to Metric Units

= 2.540 centimetres (cm) 1 inch (in.) 1 foot (ft) (=12 in.) = 30.48 cm = 0.9144 metre (m) (amot) more and and 1 yard (yd) (= 3 ft)1 square yard (yd2) = 0.8361 m<sup>2</sup> 1 acre (ac)  $(=4840 \text{ yd}^2)$  = 0.4047 hectare (ha) 1 ounce (oz) = 28.35 grams (g)= 0.4536 kilogram (kg) 1 pound (lb) 1 hundredweight (cwt) (=112 lb) = 50.80 kg1 ton (=2240 lb) = 1016 kg = 1.016 metric tons (tonnes) (t)= 0.5682 litre (1) 1 pint = 4.546 litres 1 gallon (gal) (=8 pints) = 0.02841 litre = 28.41 ml 1 fluid ounce = 1/20 pint 1 cubic foot = 28·32 litres

To convert	Multiply by	
oz ac-1 to g ha-1	70.06	
lb ac-1 to kg ha-1	1.121	
cwt ac-1 to kg ha-1	125-5	
cwt ac-1 to t ha-1	0-1255	
ton ac-1 to kg ha-1	2511	
ton ac-1 to t ha-1	2.511	
gal ca-1 to 1 ha-1	11 - 233	

#### The following factors are accurate to about 2 parts in 100:

1 lb ac<sup>-1</sup> =  $1 \cdot 1$  kg ha<sup>-1</sup> 1 gal ac<sup>-1</sup> = 11 litres ha<sup>-1</sup> 1 ton ac<sup>-1</sup> =  $2 \cdot 5$  t ha<sup>-1</sup>

#### In general reading of the text there will be no great inaccuracy in regarding:

1 lb = 0.5 kg $1 lb ac^{-1} = 1 kg ha^{-1}$ 

#### **Temperatures**

To convert °F into °C subtract 32 and multiply by  $\frac{5}{9}$  (0.556) To convert °C into °F multiply by  $\frac{9}{8}$  (1.8) and add 32

317

#### CONVERSION FACTORS

#### Factors for the Conversion of Metric to Imperial Units

1 centimetre (cm)	=0.3937 inch (in.) $=0.03281$ ft	
1 metre (m)	=1.094 yards (yd)	
1 square metre (m <sup>2</sup> )	= 1.196 square yards (yd2)	
1 hectare (ha)	= 2·471 acres (ac)	
1 gram (g)	=0.03527 ounce (oz)	
1 kilogram (kg)	= 2·205 pounds (lb)	
1 kg	= 0.01968 hundredweight (cwt) = 0.0009842 ton	
1 metric ton (tonne) (t)	=0.9842 ton	
1 litre	=1.760 pints=0.2200 gallon (gal)	
1 litre = 1000 millilitres (n	nl)=35·20 fluid ounces=0·03531 cubic foot (ft <sup>3</sup> )	

To convert	Multiply by
g ha-2 to oz ac-1	0.01427
kg ha-1 to lb ac-1	0.8921
kg ha-1 to cwt ac-1	0.007966
t ha-1 to cwt ac-1	7.966
kg ha-1 to tons ac-1	0.0003983
t ha-1 to tons ac-1	0.3983
1 ha-1 to gal ac-1	0.08902

#### Plant Nutrients

THE REAL PROPERTY.

Plant nutrients are best stated in terms of amounts of the elements (P, K, Na, Ca, Mg, S); the old 'oxide' terminology (P<sub>2</sub>O<sub>5</sub>, K<sub>2</sub>O, Na<sub>2</sub>O, CaO, MgO, SO<sub>3</sub>) is still used in work involving fertilisers and liming since Regulations require statements of P<sub>2</sub>O<sub>5</sub>, K<sub>5</sub>O, etc.

### For quick conversions

(accurate to within 2%) the following factors may be used:

$2\frac{1}{3} \times P = P_2O_5$	$\frac{3}{7} \times P_2O_{55} = P$	
$1\frac{1}{6} \times K = K_2O$	$\frac{5}{6} \times K_2O = K$	
$1\frac{2}{5} \times Ca = CaO$	$\frac{7}{10} \times \text{CaO} = \text{Ca}$	
$1\frac{2}{3} \times Mg = MgO$	$\frac{3}{5} \times MgO = Mg$	

#### For accurate conversions

To convert	Multiply by	To convert	Multiply by
P <sub>2</sub> O <sub>5</sub> to P	0.4364	P to P <sub>2</sub> O <sub>5</sub>	2.2915
K <sub>2</sub> O to K	0.8301	K to K <sub>2</sub> O	1.2047
CaO to Ca	0.7146	Ca to CaO	1.3994
MgO to Mg	0.6031	Mg to MgO	1.6581