

## SCHEDULE 3

Regulations 12, 13 and 19

## Calculation of maximum nitrogen application to crops

**Table 1**

Maximum nitrogen application to arable and forage crops

PREVIOUS CROP: N residue group 1 –		cereals carrots swedes turnips (removed) linseed			
Planned crop	Standard yield (tonne/ha)	Predominant Soil Type in Field			
		Sand or shallow	Sandy loam or other mineral	Humose	Peaty
Spring Barley <sup>c, e</sup>	5.5	150	130	80	50
Winter Barley <sup>c</sup>	6.5	200	180	120	80
Spring Wheat <sup>a, b</sup>	7.0	170	150	100	60
Winter Wheat <sup>a, b</sup>	8.0	220	200	140	80
Spring Oats <sup>c</sup>	5.0	120	100	50	20
Winter Oats <sup>c</sup>	6.0	160	140	90	50
Spring Oilseed Rape	n/a	100	100	50	20
Winter Oilseed Rape (spring) <sup>d</sup>	4.0	200	200	120	80
Winter Oilseed Rape (autumn)	n/a	30	30	30	30
Potatoes	n/a	245	225	175	145

Adjustments

- An additional 20kgN/ha is permitted for every tonne that the expected yield exceeds the standard yield.
- An additional 40kgN/ha is permitted to milling wheat varieties.
- An additional 15kgN/ha is permitted for every tonne that the expected yield exceeds the standard yield.
- The spring application can be increased by up to 30kgN/ha if the expected yield is over 4.0 tonne/ha (“t/ha”).
- An additional 15kgN/ha is permitted for high N grain distilling varieties.

*Status: This is the original version (as it was originally made).*

Planned crop	Standard yield (tonne/ha)	Predominant Soil Type in Field			
		Sand or shallow	Sandy loam or other mineral	Humose	Peaty
Forage Maize, Rape	n/a	140	120	70	40
Kale	n/a	180	160	100	60
Swedes and Turnips	n/a	110	90	50	20
Linseed	n/a	80	60	30	0

Adjustments

- a. An additional 20kgN/ha is permitted for every tonne that the expected yield exceeds the standard yield.
- b. An additional 40kgN/ha is permitted to milling wheat varieties.
- c. An additional 15kgN/ha is permitted for every tonne that the expected yield exceeds the standard yield.
- d. The spring application can be increased by up to 30kgN/ha if the expected yield is over 4.0 tonne/ha (“t/ha”).
- e. An additional 15kgN/ha is permitted for high N grain distilling varieties.

PREVIOUS CROP: N residue group 2 –	Harvested fodder (whole crop)	1–2 year low N leys <sup>1</sup> , not grazed within 2 months of ploughing out or during September or October
	oilseed rape	
	hemp	( <sup>1</sup> low N means average N use in last 2 years was less than 150 kg/ha/year)
	vining peas	
	potatoes	

Planned crop	Standard yield(t/ha)	Predominant Soil Type in Field			
		Sand or shallow	Sandy loam or other mineral	Humose	Peaty
Spring Barley <small>c, e.</small>	5.5	140	120	70	40
Winter Barley <small>c.</small>	6.5	190	170	110	70

Adjustments

- a. An additional 20kgN/ha is permitted for every tonne that the expected yield exceeds the standard yield.
- b. An additional 40kgN/ha is permitted to milling wheat varieties.
- c. An additional 15kgN/ha is permitted for every tonne that the expected yield exceeds the standard yield.
- d. The spring application can be increased by up to 30kgN/ha if the expected yield is over 4.0t/ha.
- e. An additional 15kgN/ha is permitted for high N grain distilling varieties.

If actual localised rainfall from 1st October – 1st March exceeds 450 mm: add 10kgN/ha

Planned crop	Standard yield(t/ha)	Predominant Soil Type in Field			
		Sand or shallow	Sandy loam or other mineral	Humose	Peaty
Spring Wheat a. b.	7.0	160	140	90	50
Winter Wheat a. b.	8.0	210	190	130	70
Spring Oats <sup>c</sup>	5.0	110	90	40	10
Winter Oats <sup>c</sup>	6.0	150	130	80	40
Spring Oilseed Rape	n/a	90	90	40	10
Winter Oilseed Rape (spring) <sup>d</sup>	4.0	190	190	110	70
Winter Oilseed Rape (autumn)	n/a	20	20	20	20
Potatoes	n/a	235	215	165	135
Forage Maize, Rape	n/a	140	120	70	40
Kale	n/a	170	150	90	50
Swedes and Turnips	n/a	100	80	40	10
Linseed	n/a	70	50	20	

## Adjustments

- a. An additional 20kgN/ha is permitted for every tonne that the expected yield exceeds the standard yield.
- b. An additional 40kgN/ha is permitted to milling wheat varieties.
- c. An additional 15kgN/ha is permitted for every tonne that the expected yield exceeds the standard yield.
- d. The spring application can be increased by up to 30kgN/ha if the expected yield is over 4.0t/ha.
- e. An additional 15kgN/ha is permitted for high N grain distilling varieties.

If actual localised rainfall from 1st October – 1st March exceeds 450 mm: add 10kgN/ha

PREVIOUS CROP: N residue group 3 –	harvested fodder (root only)	1–2 year low N leys, grazed within 2 months of ploughing out or during September or October
	Beans	
	combining peas	1–2 year high N leys <sup>2</sup> , not grazed within 2 months of ploughing out or during September or October

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**whole crop lupins**

<sup>2</sup>**high N** means average N use in last 2 years was more than 150 kg/ha/year, or high clover)

Planned crop	Standard yield(t/ha)	Predominant Soil Type in Field			
		Sand or shallow	Sandy loam or other mineral	Humose	Peaty
Spring Barley	5.5	130	110	60	30
Winter Barley	6.5	180	160	100	60
Spring Wheat	7.0	150	130	80	40
Winter Wheat	8.0	200	180	120	60
Spring Oats	5.0	100	80	30	0
Winter Oats	6.0	140	120	70	30
Spring Oilseed Rape	n/a	80	80	30	0
<b>Winter Oilseed Rape (spring)</b>	4.0	180	180	100	60
Winter Oilseed Rape (autumn)	n/a	10	10	10	10
Potatoes	n/a	225	205	155	125
Forage Maize, Rape	n/a	140	120	70	40
Kale	n/a	160	140	80	40
Swedes and Turnips	n/a	90	70	30	0

Adjustments

- a An additional 20kgN/ha is permitted for every tonne that the expected yield exceeds the standard yield.
- b An additional 40kgN/ha is permitted to milling wheat varieties.
- c An additional 15kgN/ha is permitted for every tonne that the expected yield exceeds the standard yield.
- d The spring application can be increased by up to 30kgN/ha if the expected yield is over 4.0t/ha.
- e An additional 15kgN/ha is permitted for high N grain distilling varieties.

If actual local rainfall from 1st October – 1st March exceeds 450 mm:

add 20kgN/ha to crops grown in sandy, shallow or sandy loam soils:

add 10kgN/ha to crops grown in other mineral, humose and peaty soils

Planned crop	Standard yield(t/ha)	Predominant Soil Type in Field			
		Sand or shallow	Sandy loam or other mineral	Humose	Peaty
Linseed	n/a	60	40	10	0

Adjustments

- a An additional 20kgN/ha is permitted for every tonne that the expected yield exceeds the standard yield.
- b An additional 40kgN/ha is permitted to milling wheat varieties.
- c An additional 15kgN/ha is permitted for every tonne that the expected yield exceeds the standard yield.
- d The spring application can be increased by up to 30kgN/ha if the expected yield is over 4.0t/ha.
- e An additional 15kgN/ha is permitted for high N grain distilling varieties.

If actual local rainfall from 1st October – 1st March exceeds 450 mm:

add 20kgN/ha to crops grown in sandy, shallow or sandy loam soils:

add 10kgN/ha to crops grown in other mineral, humose and peaty soils

**PREVIOUS CROP: N residue group 4 – grain lupin**

**1–2 year high N leys, grazed** within 2 months of ploughing out during September or October

**3–5 year low N leys, not grazed** within 2 months of ploughing out during September or October

Planned crop	Standard yield(t/ha)	Predominant Soil Type in Field			
		Sand or shallow	Sandy loam or other mineral	Humose	Peaty
Spring Barley c, e.	5.5	110	90	40	10
Winter Barley c.	6.5	170	140	80	40
Spring Wheat a, b.	7.0	130	110	60	20

Adjustments

- a. An additional 20kgN/ha is permitted for every tonne that the expected yield exceeds the standard yield.
- b. An additional 40kgN/ha is permitted to milling wheat varieties.
- c. An additional 15kgN/ha is permitted for every tonne that the expected yield exceeds the standard yield.
- d. The spring application can be increased by up to 30kgN/ha if the expected yield is over 4.0t/ha.
- e. An additional 15kgN/ha is permitted for high N grain distilling varieties

If actual local rainfall from 1 October – 1 March exceeds 450 mm:

add 20kgN/ha to crops grown in sandy, shallow or sandy loam soils:

add 10kgN/ha to crops grown in other mineral, humose and peaty soils

Status: This is the original version (as it was originally made).

Planned crop	Standard yield(t/ha)	Predominant Soil Type in Field			
		Sand or shallow	Sandy loam or other mineral	Humose	Peaty
Winter Wheat <sup>a, b.</sup>	8.0	180	160	100	40
Spring Oats <sup>c.</sup>	5.0	80	60	10	0
Winter Oats <sup>c.</sup>	6.0	130	100	50	10
Spring Oilseed Rape	n/a	60	60	10	0
Winter Oilseed Rape (spring) <sup>d.</sup>	4.0	140	140	80	40
Winter Oilseed Rape (autumn)	n/a	0	0	0	0
Potatoes	n/a	205	185	145	115
Forage Maize, Rape	n/a	140	120	70	40
Kale	n/a	110	90	30	0
Swedes and Turnips	n/a	70	50	10	0
Linseed	n/a	10	0	0	0

Adjustments

- a. An additional 20kgN/ha is permitted for every tonne that the expected yield exceeds the standard yield.
- b. An additional 40kgN/ha is permitted to milling wheat varieties.
- c. An additional 15kgN/ha is permitted for every tonne that the expected yield exceeds the standard yield.
- d. The spring application can be increased by up to 30kgN/ha if the expected yield is over 4.0t/ha.
- e. An additional 15kgN/ha is permitted for high N grain distilling varieties

If actual local rainfall from 1 October – 1 March exceeds 450 mm:  
 add 20kgN/ha to crops grown in sandy, shallow or sandy loam soils:  
 add 10kgN/ha to crops grown in other mineral, humose and peaty soils

PREVIOUS CROP:N residue group 5 –	leafy brassica vegetables	3–5 year high N leys, not grazed within 2 months of ploughing out or during September or October
	Leafy non-brassica vegetables grazed fodder	3–5 year low N leys, grazed within 2 months

Planned crop	Standard yield(t/ha)	Predominant Soil Type in Field			
		Sand or shallow	Sandy loam or other mineral	Humose	Peaty
Spring Barley <sup>c, e.</sup>	5.5	80	60	10	0
Winter Barley <sup>c.</sup>	6.5	140	110	50	10
Spring Wheat <sup>a, b.</sup>	7.0	100	30	0	0
Winter Wheat <sup>a, b.</sup>	8.0	150	130	70	10
Spring Oats <sup>c.</sup>	5.0	50	30	0	0
Winter Oats <sup>c.</sup>	6.0	100	70	20	0
Spring Oilseed Rape	n/a	30	30	0	0
Winter Oilseed Rape (spring) <sup>d.</sup>	4.0	110	110	50	0
Winter Oilseed Rape (autumn)	n/a	0	0	0	0
Potatoes	n/a	175	155	135	105
Forage Maize, Rape	n/a	70	50	0	0
Kale	n/a	110	90	30	0
Swedes and Turnips	n/a	70	50	10	0
Linseed	n/a	10	0	0	0

*Adjustments*

- An additional 20kgN/ha is permitted for every tonne that the expected yield exceeds the standard yield.
- An additional 40kgN/ha is permitted to milling wheat varieties.
- An additional 15kgN/ha is permitted for every tonne that the expected yield exceeds the standard yield.
- The spring application can be increased by up to 30kgN/ha if the expected yield is over 4.0t/ha.
- An additional 15kgN/ha is permitted for high N grain distilling varieties

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If actual local rainfall from 1 October – 1 March exceeds 450 mm:

- add 20kgN/ha to crops grown in sandy, shallow or sandy loam soils:
- add 10kgN/ha to crops grown in other mineral, humose and peaty soils

*Status: This is the original version (as it was originally made).*

PREVIOUS CROP: N residue group 6 3–5 year high N leys, not grazed within 2 months of ploughing out or during September or October

Planned crop	Standard yield(t/ha)	Predominant Soil Type in Field			
		Sand or shallow	Sandy loam or other mineral	Humose	Peaty
Spring Barley <sup>c, e</sup>	5.5	40	20	0	0
Winter Barley <sup>e</sup>	6.5	100	70	10	0
Spring Wheat <sup>a, b</sup>	7.0	170	150	100	60
Winter Wheat <sup>a, b</sup>	8.0	110	90	30	0
Spring Oats <sup>c</sup>	5.0	10	0	0	0
Winter Oats <sup>c</sup>	6.0	60	30	0	0
Spring Oilseed Rape	n/a	0	0	0	0
Winter Oilseed Rape (spring) <sup>d</sup>	4.0	70	70	10	0
Winter Oilseed Rape (autumn)	n/a	0	0	0	0
Potatoes	n/a	135	115	115	115
Forage Maize, Rape	n/a	30	10	0	0
Kale	n/a	70	50	0	0
Swedes and Turnips	n/a	50	30	0	0
Linseed	n/a	0	0	0	0

Adjustments

- An additional 20kgN/ha is permitted for every tonne that the expected yield exceeds the standard yield.
- An additional 40kgN/ha is permitted to milling wheat varieties.
- An additional 15kgN/ha is permitted for every tonne that the expected yield exceeds the standard yield.
- The spring application can be increased by up to 30kgN/ha if the expected yield is over 4.0t/ha.
- An additional 15kgN/ha is permitted for high N grain distilling varieties.

If actual local rainfall from 1 October – 1 March exceeds 450 mm:	add 20kgN/ha to crops grown in sandy, shallow or sandy loam soils:  add 10kgN/ha to crops grown in other mineral, humose and peaty soils
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**Table 2**

## Site Classes– Applicable to grassland

Grassland production is limited by growing conditions, in particular the quantity of rainfall between April and September and soil type. The combined effect of these factors defines the site class.

<i>Soil texture</i>	<i>Average April – September rainfall mm (inches)</i>			
	<i>More than 500 (20)</i>	<i>425–500 (17–20)</i>	<i>350–425 (14–17)</i>	<i>Less than 350 (14)</i>
Sands and shallow soils	2	3	4	5
All other soils	1	2	2	3

**Table 3**

## Maximum nitrogen application to grassland

<i>Grass management</i>	<i>Site Class 1</i>	<i>Site Class 2</i>	<i>Site Class 3</i>	<i>Site Class 4</i>	<i>Site Class 5</i>
	<i>kgN/ha</i>	<i>kgN/ha</i>	<i>kgN/ha</i>	<i>kgN/ha</i>	<i>kgN/ha</i>
2 or 3 cut silage and grazing	310	300	290	280	270
1 cut silage and grazing	280	270	260	250	240
Grazing with low clover	270	260	250	240	230
Hay and grazing	220	210	200	190	180
Grass with high clover	100	90	80	70	60