Southern Idaho Fertilizer Guide

Irrigated Winter Barley

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[illegible]

[illegible]

Nitrogen (N)

[illegible]

Total N Requirements Based on Potential Yield

Available Nitrogen

A [illegible] N [illegible] N ([illegible]), [illegible] N [illegible] (NO_3

M g o t o t o g t F o t o t t to o t t o t to t F o o t o o t t to t o d o d PN B t 239, *H Ca c a Ma- A ica i Ra i Paci ic N* .

Calculation of N Application Rates

o t t t N t o o t t t : (1) d t N d o g , (2) N, (3) o g N (NO_3 + NH_4) t o t t (4) o o / g t (5) g t A o 4. t o 140 , 45 o N o o o g tt, o t t o g N g 92 o o o o o t g o .

I t g t t o 180 d 220 o o t N o NO_3-

o d t t L t t o t o t t t t o o t o - o N. L t , o g N o o o o g o t o o t d t o .

Nitrogen Impact on Lodging

t t t g t o o o g t t T oo t t g t g t t d o g g t o t d g N . L o g g o g t o t o d N o t t o g g .

t t t g t t g t t t t d o g g . I o g g o t t t t t t t t d o g g . F o o t t t t d o g g d P o g o t 311, *1997 C ii d S d S ci G id P bic Va i i Wi W a a d Wi Ba* , o t o t t g .

E t o (C o) g o t g d o o d o t g d t t . I t g t t t o o g g t . F t t I o t t t t o C o g N o o 14 d 26 t d o g g . G o o o g t g o t g d o o t o t d g N, t o g g d o t o .

Phosphorus (P)

P o o t t t t t o d t d o d t g o o t t P t o o t d , o o , o g t o t o t t P.

A t g t tt o o o d o t o , o o o o t o d tt t t t P o t .

o t t t t o P t o o o t o o t o t too o o tg. L o t o t t t t P d t t . F t P t o o 5 g o o t t o t o t P o t t

Table 5. Recommended phosphorus fertilizer rates (lb P_2O_5 per acre)[1] based on soil test P and lime content.

Soil test P[2]	Lime content[3] (%)			
0 to 12 inches	0	5	10	15
(ppm)	(lb P_2O_5 per acre)			
0	160	200	240	280
5	100	140	180	220
10	40	80	120	160
15	0	20	60	100
20	0	0	0	40
25	0	0	0	0

[1] To convert P from the oxide (P_2O_5) to the elemental form (P), multiply by 0.43.

[2] $NaHCO_3$ extraction (sodium bicarbonate).

[3] Lime content is measured as calcium carbonate equivalent.

[illegible] PN 283, [illegible]

Potassium (K)

[illegible] K [illegible]

[illegible] K [illegible] 6 [illegible] K [illegible]

Table 6. Recommended potassium fertilizer rates (lb K_2O per acre) for winter barley based on soil test K.

K soil test[1] 0 to 12 inches	Potassium rates
(ppm)	(lb K_20 per acre)[2]
25	160
50	80
75	0

[1] $NaHCO_3$ extraction.

[2] To convert from the oxide (K_20) to the elemental form (K) multiply by 0.84.

Sulfur (S)

[illegible]

[illegible] NO_3-N, [illegible] N.

[illegible] 8 [illegible] O_4- [illegible]

[illegible] 20 [illegible] 40 [illegible]

[illegible] 17:1. [illegible] 17:1 [illegible]

[illegible]

Micronutrients (Fe, Mn, Zn, Cu, B)

[illegible]

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