

12 KAR 4:130. Investigational allowances.

RELATES TO: KRS 250.366(19), 250.391(3), 250.396(1), (2), 250.401

STATUTORY AUTHORITY: KRS 250.421

NECESSITY, FUNCTION, AND CONFORMITY: To prescribe scientifically sound and fair investigational allowances as a basis for declaring a fertilizer sample deficient in its guaranteed analyses and to detail the calculation of the index value of a fertilizer.

Section 1. A fertilizer shall be deemed deficient if the analysis of an official sample for any primary nutrient is below the guarantee by an amount exceeding the values in the following schedule.

Guaranteed percent	Total Nitrogen (N) percent*	Available Phosphate (P ₂ O ₅) percent*	Soluble Potash (K ₂ O) percent*
05 or less	0.37	0.65	0.39
06	0.47	0.71	0.47
07	0.59	0.77	0.56
08	0.72	0.82	0.63
09	0.81	0.86	0.70
10	0.89	0.89	0.76
12	1.03	0.95	0.87
14	1.18	1.02	0.96
16	1.29	1.12	1.05
18	1.43	1.19	1.12
20	1.57	1.32	1.18
22	1.62	1.39	1.22
24	1.65	1.46	1.26
26	1.66	1.53	1.29
28	1.58	1.59	1.33
30	1.28	1.67	1.36
32 or more	1.28	1.67	1.36

For guarantees not listed, calculate the appropriate value by interpolation.

*For these investigational allowances to be applicable, the procedures recommended by AOAC International for obtaining samples, preparation and analysis shall be used. These are described in the 15th Edition (1990) of the Official Methods of Analysis of the AOAC International. In evaluating replicate data, Table 19, page 935, Journal of the Association of Official Analytical Chemists, Volume 49, No. 5, October, 1966, shall be followed. The above materials are hereby incorporated by reference and are available for inspection and copying at 103 Regulatory Services Building, University of Kentucky, Lexington, Kentucky, during regular business hours of 8 a.m. to 5 p.m., Monday through Friday.

Section 2. A fertilizer shall be deemed deficient in the overall index value if the overall index value is less than ninety-seven (97) percent.

(1) The overall index value is calculated by comparing the value guaranteed with the value found. Unit values of the nutrients used shall be those referred to in KRS 250.401.

(2) Overall index value. Example of calculation for a 10-10-10 grade found to contain ten and one-tenth (10.1) percent Total Nitrogen (N), ten and two-tenths (10.2) percent Available Phosphate (P₂O₅) and ten and one-tenth (10.1) percent Soluble Potash (K₂O). Nutrient unit values are assumed to be three (3) dollars per unit N, two (2) dollars per unit (P₂O₅), and one (1) dollar per unit K₂O.

10.0 units N	x3 =	10.0
10.0 units P ₂ O ₅	x2 =	20.0
10.0 units K ₂ O	x1 =	10.0
Commercial Value Guaranteed =		60.0
10.0 units of N	x3 =	30.3
10.2 units of P ₂ O ₅	x2 =	20.4
10.1 units K ₂ O	x1 =	10.1
Commercial Value Found =		60.8
Overall Index Value = $100(60.8/60.00) = 101.3\%$		

Section 3. Secondary and minor elements shall be deemed deficient if the analysis of an official sample for any of these elements is below the guarantee by an amount exceeding the values in the following schedule:

Element	Investigational Allowance
Calcium)	0.2 unit + 5% of guarantee
Magnesium)	0.2 unit + 5% of guarantee
Sulfur)	0.2 unit + 5% of guarantee
Boron)	0.003 unit + 15% of guarantee
Molybdenum)	0.0001 unit + 30% of guarantee
Chlorine)	0.005 unit + 10% of guarantee
Copper)	0.005 unit + 10% of guarantee
Iron)	0.005 unit + 10% of guarantee

Manga- nese)	0.005 unit + 10% of guarantee
Sodium)	0.005 unit + 10% of guarantee
Zinc)	0.005 unit + 10% of guarantee

The maximum allowance when calculated in accordance to the above shall be one (1) unit (1 per-cent). (11 Ky.R. 512; eff. 11-13-84; Am. 21 Ky.R. 457; 1027; eff. 9-28-94.)