

APPENDIX TABLE 1

Yields of spring wheat grain and straw, the percentage of N in grain, and the amounts of N taken up by grain plus straw on Butt Close field at Woburn, 1964 and 1965

Year	1964		1965			
	Without formalin	With formalin	Without formalin in 1964 or 1965	With formalin in		1964 and 1965
cwt N/acre/year				1964	1965	
Yields (cwt/acre) of grain at 15% moisture content						
<i>Without water</i>						
0.6	9.1	26.3	6.0	11.6	29.0	19.7
1.2	15.1	29.1	10.1	17.7	34.2	23.5
1.8	14.8	26.5	16.2	18.8	34.0	23.0
<i>With water</i>						
0.6	11.6	29.9	7.2	6.0	29.1	19.6
1.2	18.3	37.2	11.0	15.3	37.4	29.8
1.8	23.4	35.8	11.3	15.0	31.4	28.7
S.E.	±1.33					
Yields (cwt/acre) of straw at 15% moisture content						
<i>Without water</i>						
0.6	14.3	37.8	12.0	23.8	35.6	23.6
1.2	25.2	43.0	16.4	24.0	42.2	28.9
1.8	28.4	43.0	25.2	26.8	42.0	29.4
<i>With water</i>						
0.6	17.6	41.8	11.8	11.8	39.3	25.0
1.2	28.1	50.0	19.0	22.0	44.8	37.5
1.8	38.1	53.0	19.8	20.1	44.8	39.6
S.E.	±1.72					
Percentage of N in grain						
<i>Without water</i>						
0.6	1.96	1.77	2.14	1.84	1.82	1.94
1.2	2.23	2.24	2.40	2.44	2.32	2.19
1.8	2.61	2.58	3.00	2.68	2.64	2.79
<i>With water</i>						
0.6	1.88	1.96	2.08	2.01	1.84	1.70
1.2	2.02	2.12	2.51	2.16	2.07	2.24
1.8	2.31	2.31	2.77	2.55	2.52	2.41
N (cwt/acre) in grain plus straw						
<i>Without water</i>						
0.6	0.200	0.487	0.168	0.271	0.590	0.433
1.2	0.377	0.704	0.336	0.451	0.883	0.632
1.8	0.457	0.767	0.576	0.574	1.043	0.772
<i>With water</i>						
0.6	0.240	0.624	0.189	0.160	0.593	0.375
1.2	0.405	0.850	0.304	0.413	0.879	0.733
1.8	0.599	0.911	0.392	0.462	1.015	0.849

APPENDIX TABLE 2
Yields of wheat¹ grain and straw, the percentage of N in grain, and the amounts of N taken up by grain plus straw on Little Knott field, Rothamsted, 1965-68

Year	1965			1966			1967			1968				
	Without formalin	With formalin	Without formalin in 1965 or 1966	1965	1966	With formalin in 1965 & 1966	Without formalin in 1966 or 1967	1966	1967	With formalin in 1966 & 1967	Without formalin in 1967 or 1968	1967	1968	With formalin in 1967 & 1968
cwt N/acre/year														
Yields (cwt/acre) of grain at 15% moisture content														
0.0	17.0	23.9	19.4	13.0	29.2	27.6	21.6	4.4	24.1	9.4	20.3	17.5	21.4	18.2
0.5	28.3	34.9	27.1	21.9	36.2	38.4	28.6	14.7	31.9	22.8	37.0	29.0	32.6	41.0
1.0	26.6	35.4	36.3	28.2	42.5	38.1	39.6	20.8	25.0	26.8	39.6	31.4	37.6	39.2
1.5	26.2	32.5	34.6	32.7	40.1	39.3	33.6	22.0	36.0	21.1	36.3	37.8	32.6	36.5
S.E.	±1.21			±1.81				—				—		
Yields (cwt/acre) of straw at 15% moisture content														
0.0	27.0	34.1	20.6	16.0	34.8	32.7	24.6	11.2	25.0	22.0	24.7	17.0	22.0	16.8
0.5	46.8	52.5	37.0	28.0	53.6	53.3	38.0	32.8	50.0	36.4	39.5	27.6	36.6	42.6
1.0	45.9	56.8	45.2	39.1	59.0	55.2	46.0	40.0	45.0	37.2	44.0	29.8	46.8	42.1
1.5	47.7	55.4	44.0	43.2	64.0	59.2	46.2	33.2	57.2	48.0	39.6	41.1	39.6	38.4
S.E.	±1.53			±2.34				—				—		
Percentage of N in grain														
0.0	1.87	1.93	1.73	1.71	1.83	1.85	1.70	2.02	1.62	1.74	1.69	1.65	1.84	1.74
0.5	2.09	2.14	1.71	1.83	1.81	1.94	1.79	1.96	1.88	1.82	1.83	1.84	1.96	1.85
1.0	2.36	2.27	1.89	1.89	2.14	1.92	2.05	2.27	2.14	2.20	2.29	2.25	2.37	2.31
1.5	2.81	2.70	2.03	2.18	2.03	1.95	2.42	2.54	2.61	2.70	2.61	2.51	2.62	2.51
S.E.	±0.069			—				—				—		
N (cwt/acre) in grain plus straw														
0.0	0.386	0.528	0.367	0.224	0.551	0.545	0.378	0.152	0.400	0.252	0.404	0.312	0.446	0.333
0.5	0.755	0.918	0.495	0.438	0.684	0.697	0.569	0.422	0.634	0.480	0.734	0.569	0.723	0.795
1.0	0.794	1.072	0.706	0.547	0.925	0.733	0.839	0.564	0.620	0.649	1.039	0.739	1.049	0.998
1.5	0.933	1.123	0.694	0.686	0.916	0.943	0.916	0.670	1.082	0.770	1.055	1.068	1.039	1.042
S.E.	±0.0449			—				—				—		

¹ Spring wheat in 1965 and 1966, winter wheat in 1967 and 1968.

APPENDIX TABLE 3

Yields of wheat¹ grain and straw, the percentage of N in grain, and the amounts of N taken up by grain plus straw, on Pastures field, Rothamsted, 1965-68

132

Year	1965		1966		1967		1968	
	Without formalin	With formalin	Without formalin	With formalin	Without formalin	With formalin	Without formalin	With formalin
cwt N/acre/year	1965	1966	1965	1966	1967	1968	1967	1968
0.0	33.6	35.9	32.2	34.5	33.1	30.6	31.6	23.4
0.5	32.7	28.5	39.0	39.7	37.8	32.6	31.6	24.6
1.0	24.1	25.1	38.8	39.0	35.0	28.9	26.6	22.8
1.5	18.5	21.7	32.9	34.2	31.0	26.0	21.4	21.5
S.E.	±1.65		±2.37 ²		—		—	
0.0	50.0	54.1	31.3	36.6	32.7	47.3	34.6	29.8
0.5	61.2	64.3	54.6	55.6	48.2	64.6	44.6	40.4
1.0	56.6	59.0	57.8	57.0	68.6	66.7	41.2	41.1
1.5	52.8	56.0	54.0	66.5	70.2	72.2	37.5	35.4
S.E.	±2.05		±2.18 ²		—		—	
0.0	2.15	2.13	1.86	1.83	1.66	1.59	1.83	1.92
0.5	2.35	2.30	1.80	1.82	1.82	1.96	2.20	1.92
1.0	2.34	2.51	2.14	1.90	2.08	2.31	2.40	2.43
1.5	2.46	2.49	2.24	2.19	2.58	2.68	2.74	2.54
S.E.	±0.036		—		—		—	
0.0	0.844	0.969	0.511	0.641	0.348	0.616	0.536	0.660
0.5	1.054	1.015	0.812	0.811	0.468	0.810	0.766	0.710
1.0	1.065	1.123	1.041	0.915	0.764	0.890	0.748	0.826
1.5	0.958	1.014	1.077	0.992	1.128	1.098	0.922	0.742
S.E.	±0.0520		—		—		—	

¹ Spring wheat in 1965 and 1966, winter wheat in 1967 and 1968.

² For use in comparing columns 1 with 2 or 4, 2 with 3, and 3 with 4 in 1966.

³ For use in comparing columns 1 with 3 or 2 with 4 in 1966.

APPENDIX TABLE 4

Yields of barley grain and straw, the percentage of N in grain, and the N taken up by grain plus straw at Saxmundham (Suffolk), 1967 and 1968

Year	1967		1968			
cwt N/acre/year	Without formalin	With formalin	Without formalin in 1967 or 1968	With formalin in		1967 and 1968
				1967	1968	
Yields (cwt/acre) of grain at 15% moisture content						
0.0	21.9 (± 1.36)	—	11.8	—	—	—
0.6	36.0	39.8	35.6	37.8	39.6	37.5
1.2	40.9	40.5	37.7	39.5	38.4	40.3
S.E.	± 0.96		± 1.24			
Yields (cwt/acre) of straw at 15% moisture content						
0.0	21.0 (± 1.74)	—	10.8	—	—	—
0.6	35.9	40.4	36.2	41.3	41.4	37.4
1.2	44.3	45.0	46.2	46.4	47.2	46.2
S.E.	± 1.23		± 1.53			
Percentage of N in grain						
0.0	1.44 (± 0.084)	—	1.70	—	—	—
0.6	1.38	1.58	1.67	1.78	1.86	1.84
1.2	1.70	1.79	2.25	2.26	2.26	2.30
S.E.	± 0.060		± 0.052			
N (cwt/acre) in grain plus straw						
0.0	0.342 (± 0.0504)	—	0.214	—	—	—
0.6	0.535	0.682	0.668	0.784	0.843	0.747
1.2	0.794	0.829	1.068	1.156	1.099	1.150
S.E.	± 0.0357		± 0.0346			

133

APPENDIX TABLE 5

Yields of, and the percentages and amounts of N in dry grass from a timothy/meadow fescue ley at Rothamsted in 1967 and 1968

Year	1967				1968			
	1st cut	2nd cut	3rd cut	1st cut	2nd cut	3rd cut	1st cut	2nd cut
cwt N/ acre/cut	Without formalin	Without formalin	Without formalin	With formalin	Without formalin	With formalin	With formalin	Without formalin
0.0	5.0	17.5	0.7	12.9	18.4	1.2	5.0	6.8
0.3	12.2	29.7	6.2	20.1	29.0	6.6	22.7	19.4
0.6	16.5	32.4	7.9	23.6	32.9	7.8	36.6	23.3
0.9	18.3	32.1	6.4	23.1	32.9	7.2	40.9	20.8
S.E.	±1.05	±0.99	±0.40	±1.05	±0.99	±0.40	±0.63	±0.63
Yields (cwt/acre) of dry grass								
0.0	2.40	1.81	1.97	1.77	1.79	2.21	1.62	1.25
0.3	2.90	1.90	2.98	2.47	2.07	3.34	1.76	1.36
0.6	3.19	2.34	3.88	2.76	2.54	4.12	2.09	1.96
0.9	3.27	2.89	4.05	2.92	2.69	4.21	2.51	2.54
S.E.	±0.070	±0.058	±0.060	±0.070	±0.058	±0.060	±0.042	±0.077
Percentage of N in dry grass								
0.0	0.116	0.319	0.015	0.226	0.328	0.026	0.081	0.086
0.3	0.347	0.562	0.185	0.491	0.600	0.219	0.401	0.264
0.6	0.521	0.757	0.307	0.647	0.835	0.321	0.764	0.456
0.9	0.593	0.927	0.258	0.672	0.882	0.304	1.030	0.527
S.E.	±0.0326	±0.0219	±0.0149	±0.0326	±0.0219	±0.0149	±0.0216	±0.0195
N (cwt/acre) in dry grass								
0.0	0.116	0.319	0.015	0.226	0.328	0.026	0.081	0.086
0.3	0.347	0.562	0.185	0.491	0.600	0.219	0.401	0.264
0.6	0.521	0.757	0.307	0.647	0.835	0.321	0.764	0.456
0.9	0.593	0.927	0.258	0.672	0.882	0.304	1.030	0.527
S.E.	±0.0326	±0.0219	±0.0149	±0.0326	±0.0219	±0.0149	±0.0216	±0.0195