Yields of the Field Experiments 1898

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Different Descriptions of Wheat; Various Fields

Rothamsted Research

RESULTS OF EXPERIMENTS WITH DIFFERENT DESCRIPTIONS OF

DESCRIPTIONS OF WHEAT.	1871; Sawpit Field; 3 cwts. Guano; after Mangels, carted off.	1872; Foster's Field; 2 cwts. Super-phosphate, 2 cwts. Nitrate Soda; after Roots, carted off.	1873; Long Hoos Field; 1½ cwt. Nitrate; after Mangels (with Dung), carted off.	1874; Upper Harpenden Field; 2 cwts. Nitrate; after Mangels (with Dung), carted off.	1875; Little Knott-Wood Field; 1½ cwt. Nitrate Soda; after Mangels (with Dung), 1874, carted off.
					DRESSED CORN
1. White-chaff (Red)	..	..	40⅝	55¼	40¼
2. Rivett's (Red)	..	..	48⅛	67	48¾
3. Chubb Wheat (Red)	28⅜	40	35¾	50½	38¼
4. Red-chaff (White)	32¾	37	35¼	48¾	34¼
5. Browick (Red)	35½	40½	38½	51⅛	38½
6. Red Wonder	31¼	43¾	37⅛	55⅛	33¼
7. Burwell (Old Red Lammas)	31⅛	41¼	35⅛	47¼	38½
8. Bristol Red	29¾	44¾	39½	53¾	31⅝
9. Red Nursery	34⅛	45¼	27⅛	41⅛	39
10. Red Langham	30¾	43¾	34⅛	53⅛	34⅞
11. Woolly Ear (White)	31¼	42¾	37	51¼	36⅛
12. Hardcastle (White)	..	40½	42	49⅝	33⅞
13. Golden Drop (Red), Hallett's	39½	49¾	44¼	51¼	38⅛
14. Victoria White, Hallett's	33¾	45¼	38¼	44¼	33¾
15. Hunter's White, Hallett's	26⅞	39¾	38⅝	45¾	26⅜
16. Original Red, Hallett's	30	35¼	36¾	43⅝	26
17. White Chiddam	26⅞	38¾	31¾	42	32¾
18. Red Rostock	37	..	46¼	53¾	37¾
19. Casey's White	29⅞	42⅛	37½	52⅛	39
20. Golden Rough-chaff (Red)	33	39¼	38½	52⅛	38¾
21. Bole's Prolific (Red)	33⅝	42¾	45¼	48⅛	43¾
22. Club Wheat (Red)	36	45¾	47½	59⅝	46⅝
23. Main's Standing White	..	..	..	..	..
24. Main's Rough-chaff (White)	..	..	..	..	..
25. Belgian (White)	..	..	..	..	..
26. Webb's Challenge (White)	..	..	..	..	..
Means	32¼	42¼	38⅞	50¾	36⅜
					WEIGHT PER
1. White-chaff (Red)	..	..	58½	61⅝	61
2. Rivett's (Red)	..	..	57⅛	58⅛	58⅛
3. Chubb Wheat (Red)	60¼	61⅞	59⅛	61⅛	59½
4. Red-chaff (White)	61⅝	62¾	60¾	61½	60¼
5. Browick (Red)	60	61⅜	59½	61¼	59⅞
6. Red Wonder	59	60⅞	60	62¼	60¾
7. Burwell (Old Red Lammas)	62	63	61½	63½	61½
8. Bristol Red	60⅞	61½	60½	61⅝	60¼
9. Red Nursery	63	65	62	65¼	62¼
10. Red Langham	60⅜	61¼	60½	63	60⅜
11. Woolly Ear (White)	61⅛	62⅛	61⅛	62¾	57¾
12. Hardcastle (White)	..	61⅞	59¾	63	59⅞
13. Golden Drop (Red), Hallett's	61¾	63	59¾	63	61⅛
14. Victoria White, Hallett's	61	62⅝	59¼	62¼	61⅜
15. Hunter's White, Hallett's	59¼	61¾	57¼	61⅛	60½
16. Original Red, Hallett's	58⅝	60	56⅛	60¾	58⅛
17. White Chiddam	62¼	63	59¼	62¾	61¾
18. Red Rostock	60⅛	..	56¾	59⅞	59¾
19. Casey's White	60¾	61½	58¾	60¾	60
20. Golden Rough-chaff (Red)	61⅝	62½	59¾	62½	61¾
21. Bole's Prolific (Red)	61½	62⅜	57½	62	60⅞
22. Club Wheat (Red)	60¾	61⅞	58¼	61⅞	61¾
23. Main's Standing White	..	..	..	..	..
24. Main's Rough-chaff (White)	..	..	..	..	..
25. Belgian (White)	..	..	..	..	..
26. Webb's Challenge (White)	..	..	..	..	..
Means	60¾	62⅛	59¼	61⅞	60¼

[1] All the crops were more or less affected by wire-worm, large bare patches appearing on many plots; and much grain was immature and blighted.

[2] Owing doubtless in great part to the imperfect development of the grain from the crop of 1879, much of the wheat sown for the crop of 1880 did not germinate at all, and of that which did come up a great deal was afterwards destroyed by wire-worm, so that up to the end of March it was a question whether there would be a plant left in the field worth saving. With the thin wheat plant there was an extraordinary growth of weeds, which the wet month of July much favoured and made it impossible to keep under. The white

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WHEAT, 12 Years, 1871–1882, each Year in a different Field.

1876; Harpenden Field; 2 cwts. Nitrate Soda; after Mangels (with Dung), 1875, carted off.	1877; Sawpit Field; 1¾ cwt. Nitrate Soda; after Mangels (with Dung), 1876, carted off.	1878; Foster's Field; 2 cwts. Nitrate, after White Turnips (with Dung and Artificial), 1877, part Fed, part carted off.	1879; [1] Little Knott-Wood Field; 2 cwts. Nitrate; after Clover. First and second Crops, as Hay; afterwards Fed.	1880; [2] Harpenden Field; 50 bushels of Soot; after Clover unmanured. One Crop as Hay; after-wards Fed.	1881; Rickyard Field; 1½ cwt. Nitrate Soda; after Mangels (with Dung and Guano), 1880, carted off.	1882; [4] Foster's Field; 2 cwts. Nitrate Soda; after Fallow 1881.	[3] Averages, 8 Years, 1871 to 1878 inclusive.	Nos.
PER ACRE.	**Bushels.**							
$49\frac{1}{2}$	$48\frac{3}{8}$	59	$22\frac{3}{4}$	$28\frac{1}{8}$	$54\frac{1}{2}$		$48\frac{7}{8}$	1
$42\frac{1}{2}$	$49\frac{5}{8}$	$66\frac{1}{8}$	16	$22\frac{3}{8}$	$52\frac{1}{4}$		$53\frac{5}{8}$	2
$40\frac{1}{4}$	$41\frac{1}{2}$	$55\frac{1}{8}$	$20\frac{3}{4}$	$14\frac{7}{8}$	.. ..		$41\frac{1}{4}$	3
$43\frac{3}{4}$	41	.. ..	.. ..	.. ..	.. ..		39	4
$39\frac{1}{8}$	$40\frac{7}{8}$	$49\frac{1}{2}$	24	$19\frac{1}{2}$	$47\frac{1}{4}$	Produce damaged; not weighed; see note 4.	$41\frac{5}{8}$	5
$44\frac{1}{4}$	$41\frac{5}{8}$	$52\frac{1}{8}$	22	$28\frac{1}{4}$	$45\frac{7}{8}$		$42\frac{3}{4}$	6
$38\frac{3}{8}$	39	$46\frac{1}{4}$	27	27	$44\frac{3}{4}$		$39\frac{5}{8}$	7
$42\frac{3}{4}$	$44\frac{1}{8}$	$52\frac{1}{8}$	$21\frac{5}{8}$	$30\frac{5}{8}$	$46\frac{1}{4}$		$42\frac{1}{8}$	8
$37\frac{1}{2}$	$40\frac{5}{8}$	$47\frac{3}{4}$	$30\frac{7}{8}$	$27\frac{1}{2}$	46		$39\frac{1}{8}$	9
$42\frac{1}{2}$	$42\frac{7}{8}$	$50\frac{3}{4}$	$25\frac{1}{4}$	$28\frac{5}{8}$	$48\frac{1}{2}$		$41\frac{5}{8}$	10
$46\frac{5}{8}$	$37\frac{1}{2}$	$48\frac{1}{4}$	20	21	$44\frac{1}{8}$		$41\frac{3}{8}$	11
44	$42\frac{1}{8}$	54	$21\frac{1}{2}$	$24\frac{3}{8}$	$45\frac{5}{8}$		$44\frac{5}{8}$	12
$48\frac{3}{8}$	$49\frac{1}{2}$	$52\frac{3}{4}$	21	$18\frac{7}{8}$	$50\frac{3}{4}$		$46\frac{3}{4}$	13
$41\frac{1}{3}$	$42\frac{5}{8}$	$43\frac{7}{8}$	$14\frac{7}{8}$	$15\frac{3}{4}$	44		$40\frac{3}{8}$	14
$43\frac{1}{2}$	40	$42\frac{1}{4}$	$17\frac{3}{8}$	$22\frac{3}{4}$	.. ..		$37\frac{7}{8}$	15
$40\frac{1}{8}$	$44\frac{3}{8}$	.. ..	.. ..	.. ..	.. ..		$36\frac{1}{2}$	16
$37\frac{1}{2}$	$37\frac{5}{8}$	$49\frac{3}{4}$	$11\frac{7}{8}$	$27\frac{3}{8}$	$47\frac{1}{8}$		$37\frac{1}{8}$	17
40	$46\frac{3}{8}$	57	$8\frac{1}{2}$	$28\frac{3}{8}$	$45\frac{3}{4}$		$45\frac{1}{8}$	18
$45\frac{1}{2}$	43	$47\frac{3}{4}$	$15\frac{3}{8}$	$24\frac{1}{8}$	$42\frac{7}{8}$		$42\frac{1}{8}$	19
$38\frac{3}{8}$	$36\frac{3}{4}$	$46\frac{3}{4}$	$14\frac{3}{8}$	$31\frac{1}{4}$	$41\frac{5}{8}$		$40\frac{3}{8}$	20
$41\frac{3}{8}$	$44\frac{3}{4}$	$52\frac{3}{4}$	31	$24\frac{1}{2}$	$46\frac{1}{2}$		44	21
$47\frac{5}{8}$	$49\frac{1}{2}$	61	$23\frac{1}{2}$	$16\frac{3}{8}$	$43\frac{3}{8}$		$49\frac{1}{4}$	22
.. ..	.. ..	$50\frac{1}{8}$	$32\frac{1}{4}$	$16\frac{1}{2}$	$44\frac{1}{4}$		$50\frac{1}{8}$	23
.. ..	.. ..	$50\frac{5}{8}$	24	$15\frac{7}{8}$	$39\frac{5}{8}$		$50\frac{5}{8}$	24
.. ..	.. ..	$52\frac{1}{2}$	$21\frac{3}{4}$	$9\frac{3}{4}$	.. ..		$52\frac{1}{2}$	25
.. ..	.. ..		.. ..	$30\frac{1}{4}$	$39\frac{1}{2}$		.. ..	26
$42\frac{1}{2}$	$42\frac{7}{8}$	$51\frac{3}{4}$	$21\frac{1}{4}$	$23\frac{1}{8}$	$45\frac{3}{4}$		$43\frac{1}{8}$	**Means.**
BUSHEL.	**Lbs.**							
63	$60\frac{3}{4}$	$60\frac{7}{8}$	$51\frac{7}{8}$	$54\frac{3}{4}$	$57\frac{5}{8}$		61	1
$59\frac{7}{8}$	$60\frac{1}{4}$	$58\frac{7}{8}$	$49\frac{1}{8}$	$55\frac{7}{8}$	$56\frac{3}{8}$		$58\frac{3}{4}$	2
$62\frac{7}{8}$	$60\frac{1}{4}$	$61\frac{1}{4}$	53	$53\frac{3}{4}$	.. ..		$60\frac{3}{4}$	3
$63\frac{1}{8}$	$60\frac{1}{4}$	.. ..	.. ..	.. ..	.. ..		$61\frac{3}{8}$	4
$62\frac{1}{2}$	$60\frac{3}{4}$	$62\frac{1}{2}$	$52\frac{5}{8}$	$54\frac{7}{8}$	$60\frac{1}{8}$	Produce damaged; not weighed; see note 4.	61	5
63	$61\frac{1}{4}$	63	$52\frac{1}{2}$	$56\frac{5}{8}$	$60\frac{1}{4}$		$61\frac{1}{4}$	6
$64\frac{3}{4}$	$61\frac{1}{4}$	64	$55\frac{1}{4}$	$58\frac{1}{8}$	61		$62\frac{5}{8}$	7
$62\frac{3}{4}$	$59\frac{3}{4}$	$63\frac{1}{8}$	$54\frac{3}{8}$	$57\frac{1}{8}$	$60\frac{3}{4}$		$61\frac{1}{4}$	8
66	$58\frac{3}{4}$	$62\frac{3}{4}$	$57\frac{1}{4}$	$59\frac{5}{8}$	$61\frac{3}{8}$		$63\frac{1}{8}$	9
$63\frac{5}{8}$	$61\frac{1}{8}$	$63\frac{1}{8}$	$54\frac{1}{2}$	$56\frac{3}{4}$	59		$61\frac{5}{8}$	10
$63\frac{5}{8}$	$59\frac{7}{8}$	$62\frac{1}{8}$	$52\frac{1}{8}$	$55\frac{5}{8}$	$60\frac{5}{8}$		$61\frac{3}{8}$	11
$63\frac{1}{2}$	$59\frac{7}{8}$	$61\frac{1}{2}$	$52\frac{3}{8}$	$55\frac{3}{8}$	$60\frac{1}{2}$		$61\frac{3}{8}$	12
$64\frac{3}{4}$	$61\frac{3}{4}$	$63\frac{1}{2}$	$52\frac{3}{4}$	$55\frac{3}{4}$	$61\frac{1}{4}$		$62\frac{1}{2}$	13
$63\frac{3}{4}$	61	$61\frac{3}{4}$	$51\frac{1}{2}$	$56\frac{1}{4}$	$60\frac{7}{8}$		$61\frac{3}{4}$	14
$63\frac{5}{8}$	$59\frac{1}{4}$	$62\frac{1}{8}$	55	$59\frac{1}{4}$	.. ..		$60\frac{3}{4}$	15
$62\frac{3}{4}$	59	.. ..	.. ..	.. ..	.. ..		$59\frac{3}{4}$	16
$64\frac{5}{8}$	$61\frac{1}{8}$	$61\frac{1}{2}$	$54\frac{1}{2}$	58	$60\frac{1}{8}$		62	17
$63\frac{1}{8}$	$59\frac{1}{2}$	$60\frac{1}{4}$	54	$56\frac{5}{8}$	$60\frac{7}{8}$		$59\frac{7}{8}$	18
$63\frac{1}{8}$	$59\frac{3}{8}$	$60\frac{3}{4}$	$55\frac{3}{4}$	$58\frac{1}{4}$	$61\frac{7}{8}$		$60\frac{5}{8}$	19
$65\frac{1}{8}$	$60\frac{3}{4}$	$61\frac{3}{4}$	$54\frac{1}{4}$	$57\frac{3}{4}$	$62\frac{1}{4}$		62	20
$63\frac{7}{8}$	$60\frac{1}{4}$	$63\frac{1}{8}$	$55\frac{1}{4}$	$55\frac{7}{8}$	$61\frac{3}{4}$		$61\frac{1}{2}$	21
$63\frac{1}{4}$	$59\frac{3}{4}$	$62\frac{1}{8}$	$52\frac{7}{8}$	$55\frac{3}{4}$	$60\frac{3}{4}$		$61\frac{1}{8}$	22
.. ..	.. ..	$61\frac{3}{4}$	$56\frac{1}{4}$	$57\frac{1}{8}$	61		$61\frac{3}{4}$	23
.. ..	.. ..	$61\frac{3}{8}$	$53\frac{1}{4}$	$56\frac{1}{4}$	$61\frac{1}{8}$		$61\frac{3}{4}$	24
.. ..	.. ..	$60\frac{3}{4}$	$51\frac{3}{4}$	$53\frac{3}{8}$	.. ..		$60\frac{3}{4}$	25
.. ..	.. ..	.. ..	.. ..	$59\frac{1}{8}$	$58\frac{7}{8}$		.. ..	26
$63\frac{1}{2}$	$60\frac{1}{4}$	62	$53\frac{1}{2}$	$56\frac{3}{4}$	$60\frac{3}{4}$		$61\frac{1}{4}$	**Means.**

wheats appeared to suffer most, either from imperfectly developed seed, wire-worm, or blight. The most satisfactory crop was " Webb's Challenge," the seed for which was obtained direct from the seedsman, not grown on the farm, as were the others.

(²) Owing to the produce of 1879 and 1880 being so exceptionally bad, that of those years is not included in the averages; nor is that of 1881.

(⁴) The crop of 1882 was completely beaten down by the high winds and heavy rains of July, which greatly interfered with the proper maturation of the grain; the produce was therefore not kept separate or weighed; and in some places not even threshed.