

Table 17. Summary of mean yields (kg/ha) of 27 wheats grown in the 1991 Northern Regional Performance Nursery at 15 locations with state means and ranks.

C.I. OR SEL. NO.	ENTRY: NO.	LINCOLN NEBRASKA	NORTH PLATTE NEBRASKA	SIDNEY NEBRASKA	NEBRASKA STATE MEAN	ARCHER WYOMING	BROOKINGS S. DAKOTA	PIERRE S. DAKOTA	SOUTH DAKOTA STATE MEAN
XNH1419	25	2421 1	1930 2	4322 1	2891 1	2221 2	4287 2	3485 9	3886 3
NE83407	20	2228 2	1435 10	2949 21	2204 7	2011 7	3670 10	3899 4	3784 4
SD88137	9	1175 23	1508 9	4242 2	2308 5	2235 1	4456 1	3928 3	4192 1
SD87144	4	1968 5	1659 6	3853 8	2493 3	1939 12	3679 8	4212 1	3945 2
ND8844	16	1370 18	1745 3	3970 4	2362 4	1854 13	3544 14	3288 15	3416 13
SD88240	10	1103 24	1204 14	3800 9	2035 17	2161 4	3672 9	3831 5	3751 5
ND85137	14	1509 12	1301 12	3612 13	2141 13	1439 22	3399 16	2504 24	2952 23
XNH1401	24	1858 6	892 24	2853 23	1868 23	1988 9	3613 11	2987 20	3300 15
NE87613	19	1616 9	1514 8	3432 16	2187 9	1293 26	3603 12	3414 10	3508 11
SD88201	6	1603 10	911 23	3892 6	2135 14	2020 6	3942 3	3553 8	3747 6
SD88250	13	1491 13	1003 18	3329 19	1941 21	1760 14	3868 5	3381 12	3625 8
SD88218	5	1488 14	2009 1	4059 3	2519 2	1614 18	3765 7	3384 11	3575 9
NE83498	23	1988 4	1547 7	3364 18	2300 6	1394 24	3169 18	3373 13	3271 16
ND8892	17	1267 20	1706 4	3487 14	2153 12	1997 8	3453 15	2701 22	3077 22
SD88192	7	1515 11	835 25	3405 17	1918 22	1397 23	3586 13	3740 7	3663 7
SD88171	12	1423 16	1298 13	3740 11	2154 11	1511 20	3890 4	3057 19	3473 12
NE87612	18	1249 21	1152 16	3444 15	1948 20	1749 15	3031 22	4015 2	3523 10
ND86105	15	1094 25	1172 15	3890 7	2052 15	1305 25	3334 17	3329 14	3332 14
XNH1469	26	1623 8	946 22	2712 24	1760 24	2107 5	2915 23	3283 17	3099 21
NE88536	21	1847 7	1397 11	3245 20	2163 10	1468 21	3159 19	3285 16	3222 17
NE88635	22	1184 22	1688 5	3731 12	2201 8	2186 3	3086 21	2652 23	2869 25
XNH1486	27	1462 15	1000 19	2473 26	1645 25	1979 11	2422 25	3826 6	3124 19
PI476975	3	2013 3	989 20	2935 22	1979 19	1672 17	3144 20	3221 18	3183 18
SD88120	8	1406 17	675 27	2690 25	1590 26	1699 16	2244 26	2198 26	2221 26
CI17439	2	1363 19	949 21	3795 10	2036 16	782 27	3801 6	2431 25	3116 20
SD88148	11	1024 26	1125 17	3893 5	2014 18	1988 9	2877 24	2911 21	2894 24
CI1442	1	883 27	807 26	2269 27	1320 27	1594 19	1851 27	1768 27	1810 27
MEAN		1525	1274	3459	2086	1754	3387	3246	3317
LSD(.05)		495	396	491	613	457	500	992	828
C.V.		19.8	19.0	8.7	13.5	15.9	9.0	18.7	14.3

Table 17. Continued.

C.I. OR SEL. NO.	ENTRY: NO.	WASECA MINNESOTA	ROSEMOUNT MINNESOTA	MINNESOTA STATE MEAN	WILLISTON N. DAKOTA	CASSELTON N. DAKOTA	CARRINGTON N. DAKOTA	NORTH DAKOTA STATE MEAN
XNH1419	25	3397 1	2410 15	2904 4	2303 9	4929 1	3186 4	3473 1
NE83407	20	3165 3	2439 14	2802 5	2086 16	4221 15	1900 25	2736 22
SD88137	9	2995 8	3017 1	3006 1	2034 18	4469 7	3913 1	3472 2
SD87144	4	3222 2	2309 16	2765 8	1696 27	4502 6	3357 2	3185 4
ND8844	16	2250 22	1666 25	1958 24	2350 6	4187 18	2878 8	3138 8
SD88240	10	3000 7	1565 26	2282 19	2492 2	4284 12	2429 15	3072 12
ND85137	14	2521 17	2603 8	2562 14	2308 8	3977 23	3199 3	3161 6
XNH1401	24	3156 5	2768 4	2962 3	1987 23	4561 4	2325 19	2958 16
NE87613	19	2657 13	1845 21	2251 21	1778 26	4221 15	2490 14	2829 20
SD88201	6	2924 10	2567 10	2745 9	2099 14	4312 10	2331 18	2914 17
SD88250	13	3161 4	2845 3	3003 2	2318 7	4084 21	2511 13	2971 15
SD88218	5	3094 6	2448 13	2771 6	1874 25	4351 8	2786 9	3004 14
NE83498	23	2498 18	2659 6	2578 13	2029 19	4743 2	2377 17	3050 13
ND8892	17	2160 23	2275 17	2218 22	2290 10	4090 20	3164 5	3181 5
SD88192	7	2662 12	2538 11	2600 12	2242 11	4507 5	2672 11	3140 7
SD88171	12	2571 16	2468 12	2519 16	2368 4	4188 17	2759 10	3105 10
NE87612	18	2464 19	2587 9	2525 15	1955 24	3907 25	2108 23	2657 26
ND86105	15	1808 26	1778 23	1793 26	2550 1	4137 19	2938 7	3208 3
XNH1469	26	2283 21	2730 5	2507 17	2396 3	3882 26	1688 27	2655 27
NE88536	21	2973 9	2257 18	2615 11	2015 22	4234 14	1886 26	2712 24
NE88635	22	2303 20	2215 19	2259 20	2139 13	4622 3	2537 12	3099 11
XNH1486	27	1868 25	1760 24	1814 25	2018 21	4255 13	2299 20	2857 19
PI476975	3	2635 14	2901 2	2768 7	2022 20	4350 9	2043 24	2805 21
SD88120	8	2578 15	2659 6	2618 10	2058 17	4000 22	2112 22	2723 23
CI17439	2	2865 11	1865 20	2365 18	2356 5	3953 24	3042 6	3117 9
SD88148	11	2149 24	1789 22	1969 23	2094 15	4300 11	2223 21	2872 18
CI1442	1	1514 27	1145 27	1330 27	2199 12	3402 27	2422 16	2674 25
MEAN		2625	2300	2463	2150	4247	2577	2991
LSD(.05)		372	565	669	292	396	880	N.S.
C.V.		8.6	15.0	11.8	9.6	5.7	20.8	11.8

Table 17. Concluded.

C.I. OR SEL. NO.	ENTRY NO.	SIDNEY MONTANA	BOZEMAN MONTANA	MONTANA STATE MEAN	ABERDEEN IDAHO	PRESTON IDAHO	IDAHO STATE MEAN	REGIONAL AVERAGE
XNH1419	25	1928 11	4813 10	3370 12	7945 9	2570 7	5257 7	3476 1
NE83407	20	1785 14	4544 15	3165 18	10279 1	3131 1	6705 1	3316 2
SD88137	9	1506 21	4117 24	2812 23	7151 19	2341 11	4746 14	3272 3
SD87144	4	1609 18	4763 12	3186 17	6892 21	2328 12	4610 20	3199 4
ND8844	16	3266 1	5562 4	4414 1	6549 24	2691 4	4620 18	3145 5
SD88240	10	2088 9	5341 6	3715 4	7877 11	2095 15	4986 12	3130 6
ND85137	14	2719 3	4977 8	3848 3	8022 8	2657 6	5340 6	3116 7
XNH1401	24	1412 24	5704 2	3558 7	7877 11	2523 8	5200 9	3100 8
NE87613	19	1504 22	4317 20	2911 21	9640 2	2677 5	6159 2	3067 9
SD88201	6	1963 10	4441 18	3202 16	7437 16	1961 17	4699 15	3064 10
SD88250	13	2219 7	4628 13	3424 11	7070 20	2122 14	4596 21	3053 11
SD88218	5	1564 20	4194 22	2879 22	7168 17	1873 21	4521 22	3045 12
NE83498	23	808 27	4781 11	2795 24	8486 6	1941 18	5213 8	3010 13
ND8892	17	2570 5	4605 14	3587 6	7517 15	1786 22	4652 16	3005 14
SD88182	7	2141 8	4521 16	3331 13	6791 22	2489 9	4640 17	3003 16
SD88171	12	2419 6	4489 17	3454 10	7615 14	1255 27	4435 23	3003 15
NE87612	18	1141 26	4183 23	2662 25	9391 3	2415 10	5903 3	2986 17
ND86105	15	2599 4	5842 1	4220 2	6720 23	1894 19	4307 24	2959 18
XNH1469	26	1445 23	5637 3	3541 9	7158 18	3037 2	5097 11	2923 19
NE88536	21	1753 15	4291 21	3022 19	8483 7	1416 25	4949 13	2914 20
NE88635	22	1677 16	4361 19	3019 20	7834 13	1392 26	4613 19	2907 21
XNH1486	27	1919 12	5441 5	3680 5	7924 10	2795 3	5360 5	2896 22
PI476975	3	1381 25	3684 26	2532 26	8658 5	1571 24	5114 10	2881 23
SD88120	8	1631 17	4926 9	3279 15	9055 4	2324 13	5689 4	2817 24
CI17439	2	2892 2	3697 25	3294 14	6448 25	1894 19	4171 26	2809 25
SD88148	11	1892 13	5205 7	3549 8	6347 26	2042 16	4194 25	2791 26
CI1442	1	1609 18	3250 27	2429 27	5301 27	1601 23	3451 27	2108 27
MEAN		1905	4678	3292	7690	2179	4934	3000
LSD (.05)		789	1071	N.S.	2005	N.S.	N.S.	352
C.V.		29.3	16.2	20.4	12.7	23.8	15.8	15.7

Table 18. Summary of mean yields (kg/ha) and ranks for 27 wheats grown in the 1991 Northern Regional Performance Nursery at 7 locations from which a CV of 15 or less and a significant F test for entries were obtained.

C.I. OR SEL. NO.	: ENTRY: : NO. :	SIDNEY : NEBRASKA :	BROOKINGS : S. DAKOTA :	WASECA : MINNESOTA :	ROSEMOUNT : MINNESOTA :	WILLISTON : N. DAKOTA :	CASSELTON : N. DAKOTA :	ABERDEEN : IDAHO :	REGIONAL : AVERAGE :
XNH1419	25	4322 1	4287 2	3397 1	2410 15	2303 9	4929 1	7945 9	4227 1
NE83407	20	2949 21	3670 10	3165 3	2439 14	2086 16	4221 15	10279 1	4115 2
SD88137	9	4242 2	4456 1	2995 8	3017 1	2034 18	4469 7	7151 19	4052 3
SD88201	6	3892 6	3942 3	2924 10	2567 10	2099 14	4312 10	7437 16	3882 5
NE87613	19	3432 16	3603 12	2657 13	1845 21	1778 26	4221 15	9640 2	3882 4
NE83498	23	3364 18	3169 18	2498 18	2659 6	2029 19	4743 2	8486 6	3850 6
SD88171	12	3740 11	3890 4	2571 16	2468 12	2368 4	4188 17	7615 14	3834 7
XNH1401	24	2853 23	3613 11	3156 5	2768 4	1987 23	4561 4	7877 11	3831 8
NE87612	18	3444 15	3031 22	2464 19	2587 9	1955 24	3907 25	9391 3	3826 9
SD88218	5	4059 3	3765 7	3094 6	2448 13	1874 25	4351 8	7168 17	3823 10
SD88240	10	3800 9	3672 9	3000 7	1565 26	2492 2	4294 12	7877 11	3814 11
SD88250	13	3329 19	3868 5	3161 4	2845 3	2318 7	4084 21	7070 20	3811 12
PI476975	3	2935 22	3144 20	2635 14	2901 2	2022 20	4350 9	8658 5	3806 13
ND85137	14	3612 13	3399 16	2521 17	2603 8	2308 8	3977 23	8022 8	3777 14
NE88536	21	3245 20	3159 19	2973 9	2257 18	2015 22	4234 14	8483 7	3767 15
SD87144	4	3853 8	3679 8	3222 2	2309 16	1696 27	4502 6	6892 21	3736 16
NE88635	22	3731 12	3086 21	2303 20	2215 19	2139 13	4622 3	7834 13	3704 17
SD88192	7	3405 17	3586 13	2662 12	2538 11	2242 11	4507 5	6791 22	3676 18
SD88120	8	2690 25	2244 26	2578 15	2659 6	2058 17	4000 22	9055 4	3612 19
ND8892	17	3487 14	3453 15	2160 23	2275 17	2290 10	4090 20	7517 15	3610 20
CI17439	2	3795 10	3801 6	2865 11	1865 20	2356 5	3953 24	6448 25	3583 21
ND8844	16	3970 4	3544 14	2250 22	1666 25	2350 6	4187 18	6549 24	3502 22
ND86105	15	3890 7	3334 17	1808 26	1778 23	2550 1	4137 19	6720 23	3460 23
XNH1469	26	2712 24	2915 23	2283 21	2730 5	2396 3	3882 26	7158 18	3439 24
SD88148	11	3893 5	2877 24	2149 24	1789 22	2094 15	4300 11	6347 26	3350 25
XNH1486	27	2473 26	2422 25	1868 25	1760 24	2018 21	4255 13	7924 10	3246 26
CI1442	1	2269 27	1851 27	1514 27	1145 27	2199 12	3402 27	5301 27	2526 27
MEAN		3459	3387	2625	2300	2150	4247	7690	3694
LSD (.05)		491	500	372	565	292	396	2005	522
C.V.		8.7	9.0	8.6	15.0	9.6	5.7	12.7	10.7

Table 19. Summary of mean yields (kg/ha) and ranks of 27 wheats grown in the Northern Regional Performance Nursery for 4 intra-regional production zones (after Peterson, 1992).

C.I. OR SEL. NO.	: ENTRY: NO.	: NORTH- CENTRAL PLAINS	: NORTHERN HIGH PLAINS	: NORTHERN PLAINS	: NORTH- WEST PLAINS	: REGIONAL AVERAGE
NO. OF LOCATIONS		6	4	2	3	15
XNH1419	25	3128 1	4264 2	4058 2	2572 9	3529 1
SD88137	9	2899 2	3992 5	4191 1	2489 15	3333 2
NE83407	20	2648 5	4592 1	3060 22	2590 7	3293 3
SD87144	4	2782 4	3753 16	3929 3	2505 14	3240 4
ND8844	16	2424 16	3766 14	3532 11	2968 1	3196 5
SD88240	10	2390 19	3983 6	3362 15	2804 3	3172 6
ND85137	14	2491 11	3933 8	3588 6	2510 13	3147 7
SD88201	6	2640 6	3827 9	3321 17	2538 11	3115 8
SD88218	5	2810 3	3678 19	3569 8	2274 20	3108 9
NE87613	19	2445 13	4261 3	3355 16	2232 21	3090 10
XNH1401	24	2523 10	3810 10	3443 14	2129 24	3085 11
SD88250	13	2616 7	3570 21	3297 18	2640 5	3070 12
SD88171	12	2565 8	3530 23	3473 13	2615 6	3049 13
ND8892	17	2391 18	3697 18	3627 4	2520 12	3035 14
NE83498	23	2537 9	3796 11	3560 9	2070 25	3033 15
SD88192	7	2424 17	3520 24	3590 5	2707 4	3028 16
ND86105	15	2179 23	3452 25	3538 10	2826 2	3018 17
NE87612	18	2321 21	4250 4	3008 25	2370 17	3015 18
NE88635	22	2368 20	3786 13	3580 7	2156 23	2959 19
NE88536	21	2480 12	3653 20	3060 23	2351 18	2935 20
XNH1469	26	2202 22	3754 15	2785 27	2375 16	2910 21
PI476975	3	2436 15	3709 17	3197 21	2208 22	2885 22
CI17439	2	2440 14	3230 26	3498 12	2560 10	2871 23
XNH1486	27	1831 26	3793 12	3277 19	2588 8	2869 24
SD88148	11	2143 24	3567 22	3262 20	2299 19	2860 25
SD88120	8	2042 25	3942 7	3056 24	1963 26	2809 26
CI1442	1	1412 27	2691 27	2912 26	1859 27	2118 27
MEAN		2428	3770	3412	2434	3000
LSD(.05)		424	N.S.	N.S.	N.S.	352
C.V.		11.9	14.4	12.2	20.1	15.7

Table 20. Summary of mean yields (kg/ha) and ranks for 10 wheats grown in the Northern Regional Performance Nursery at 11 sites in 1990 and 1991 with state means and ranks.

C.I. OR SEL. NO.	ENTRY: NO.	LINCOLN NEBRASKA	NORTH PLATTE NEBRASKA	SIDNEY NEBRASKA	NEBRASKA STATE MEAN	ARCHER WYOMING	ROSEMOUNT MINNESOTA	BROOKINGS S. DAKOTA
NE83407	20	3449 1	2830 2	2812 7	3030 1	1705 5	2304 3	2530 5
XNH1401	24	3088 4	2825 6	2646 8	2786 6	1807 1	2241 6	2161 8
NE87613	19	3024 5	2953 1	3002 5	2993 3	1584 6	1885 9	2538 4
NE87612	18	2989 6	2783 3	3005 4	2926 4	1735 2	2108 8	2101 9
ND85137	14	2497 7	2473 7	3010 3	2660 7	1426 8	2251 4	2436 6
SD87144	4	3144 3	2752 4	3127 1	3008 2	1724 4	2572 1	2812 3
PI476975	3	3351 2	2712 5	2493 9	2852 5	1574 7	2563 2	2190 7
ND86105	15	2040 8	2144 9	3110 2	2431 8	1382 9	2187 7	2855 2
CI17439	2	1947 9	2154 8	2962 6	2354 9	1203 10	2250 5	3264 1
CI1442	1	1521 10	2072 10	2286 10	1959 10	1732 3	1491 10	1273 10
MEAN		2705	2550	2845	2700	1587	2185	2416
LSD(.05)		1122	N.S.	N.S.	N.S.	N.S.	N.S.	960
C.V.		12.0	11.6	7.2	10.4	14.9	23.9	12.2

Table 20. Concluded.

C.I. OR SEL. NO.	ENTRY: NO.	SIDNEY MONTANA	BOZEMAN MONTANA	MONTANA STATE MEAN	WILLISTON N. DAKOTA	ABERDEEN IDAHO	PRESTON IDAHO	IDAHO STATE MEAN	REGIONAL AVERAGE
NE83407	20	2263 5	4685 3	3474 3	1566 8	9398 1	2828 1	6113 1	3306 1
XNH1401	24	2092 9	4855 1	3474 4	1648 5	9179 2	2657 2	5918 2	3182 2
NE87613	19	2135 8	4693 2	3414 5	1635 6	8584 4	2484 4	5534 4	3138 3
NE87612	18	1985 10	4620 4	3302 7	1573 7	8797 3	2492 3	5645 3	3108 4
ND85137	14	2759 1	4556 5	3657 1	1924 3	8026 5	2359 5	5193 5	3065 5
SD87144	4	2311 4	4498 6	3405 6	1375 10	6679 7	2214 6	4446 7	3019 6
PI476975	3	2156 6	3750 8	2953 9	1522 9	8006 6	2065 7	5036 6	2944 7
ND86105	15	2599 3	4393 7	3496 2	2001 1	6470 8	1407 10	3939 9	2781 8
CI17439	2	2756 2	3692 9	3224 8	1925 2	6330 9	1903 9	4117 8	2762 9
CI1442	1	2148 7	3128 10	2638 10	1769 4	5393 10	1980 8	3686 10	2254 10
MEAN		2320	4279	3300	1694	7686	2239	4963	2955
LSD(.05)		N.S.	N.S.	N.S.	N.S.	2991	N.S.	N.S.	433
C.V.		16.0	15.1	15.9	10.9	11.6	22.5	14.6	14.9

Table 21. Mean yield, regression coefficient, correlation coefficient, and coefficient of determination from linear regression analysis of variety mean yield on nursery mean yield for the 27 entries in the 1991 Northern Regional Performance Nursery grown at 15 locations.

C.I. OR SEL. NO.	: ENTRY: NO.	: MEAN YIELD : OVER : LOCATIONS : KG/HA	: REGRESSION : COEFFICIENT : (B)	: CORRELATION : COEFFICIENT : (R)	: COEFFICIENT : OF : DETERMINATION : (R ²)
XNH1419	25	3476	0.97	0.98	0.96
NE83407	20	3316	1.26	0.95	0.91
SD88137	9	3272	0.90	0.93	0.87
SD87144	4	3199	0.88	0.96	0.92
ND8844	16	3145	0.84	0.93	0.86
SD88240	10	3130	1.07	0.98	0.96
ND85137	14	3116	1.00	0.97	0.95
XNH1401	24	3100	1.07	0.97	0.94
NE87613	19	3067	1.25	0.98	0.96
SD88201	6	3064	0.98	0.98	0.97
SD88250	13	3053	0.90	0.98	0.97
SD88218	5	3045	0.91	0.97	0.94
NE83498	23	3010	1.14	0.98	0.96
ND8892	17	3005	0.93	0.97	0.95
SD88192	7	3003	0.90	0.98	0.96
SD88171	12	3003	0.99	0.98	0.96
NE87612	18	2986	1.22	0.97	0.94
ND86105	15	2959	0.96	0.94	0.88
XNH1469	26	2923	0.94	0.94	0.89
NE88536	21	2914	1.10	0.98	0.96
NE88635	22	2907	1.02	0.98	0.95
XNH1486	27	2896	1.06	0.95	0.91
PI476975	3	2881	1.10	0.96	0.93
SD88120	8	2817	1.19	0.96	0.93
CI17439	2	2809	0.82	0.92	0.85
SD88148	11	2791	0.90	0.96	0.92
CI1442	1	2108	0.67	0.94	0.89

Table 22. Mean yield, regression coefficient, correlation coefficient, and coefficient of determination from linear regression analysis of variety mean yield on nursery mean yield for the 10 entries in the 1990 and 1991 Northern Regional Performance Nursery grown at 11 locations.

C.I. OR SEL. NO.	: ENTRY: NO.	: MEAN YIELD : OVER : LOCATIONS : KG/HA :	: REGRESSION : COEFFICIENT : (B) :	: CORRELATION : COEFFICIENT : (R) :	: COEFFICIENT : OF : DETERMINATION : (R ²) :
NE83407	20	3306	1.24	0.98	0.97
XNH1401	24	3182	1.24	0.96	0.93
NE87613	19	3138	1.16	0.98	0.97
NE87612	18	3108	1.20	0.99	0.97
ND85137	14	3065	1.03	0.99	0.98
SD87144	4	3019	0.85	0.97	0.95
PI476975	3	2944	1.06	0.97	0.95
ND86105	15	2781	0.82	0.91	0.84
CI17439	2	2762	0.75	0.93	0.87
CI1442	1	2254	0.65	0.94	0.88