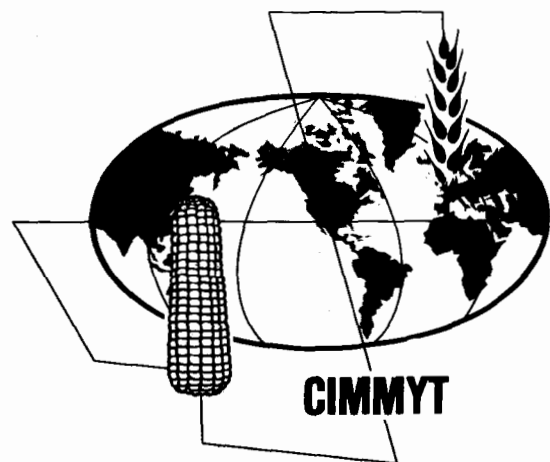


March 1966

PRELIMINARY TABLES OF THE  
IV INTERNATIONAL SPRING WHEAT  
YIELD NURSERY, 1967-68.



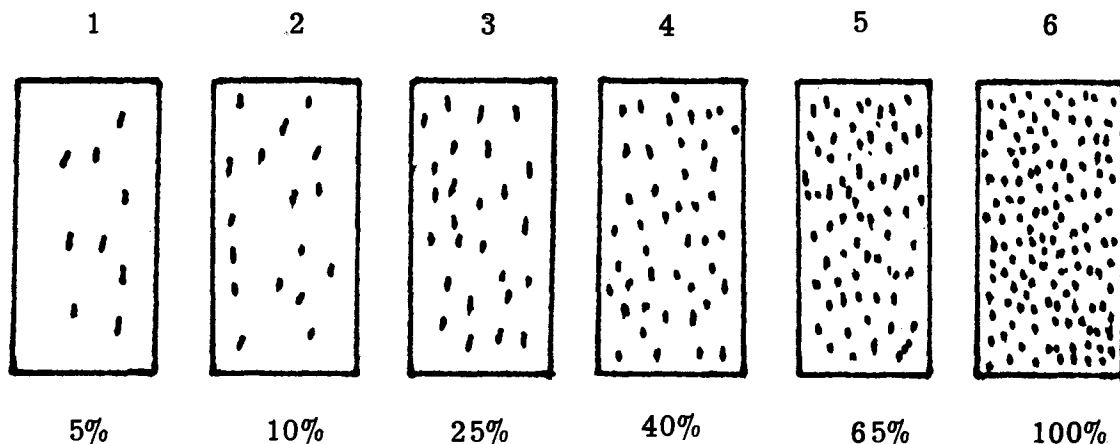
Centro Internacional de Mejoramiento de Maíz y Trigo  
International Maize and Wheat Improvement Center  
Londres 40, México 6, D.F.

## CEREAL RUST DATA

The methods used in summarizing these data and recommended for determining reactions of wheat in the field to cereal rust, are those described by Dr. W. Q. Loegering for use in the U.S.D.A. International Wheat Rust Nursery. Field notes generally consist of two determinations: 1) Severity or amount of infection and 2) Response or type and kind of infection.

Severity is an estimate of the percentage of the plant surface infected with rust. A Modified Cobb scale is used in estimating the percent of infection.

### SCALE FOR ESTIMATING RUST



In the above diagrams the shaded spots represent rust. Numbers of uredia and size of uredia determine the severity, or percent of rustiness. In addition to the above diagrams, "t" or trace is used to indicate severities of less than 1%.

Response is determined by the size and the characteristics of the rust pustules. Response is recorded by the following symbols:

- 0e= no infection, rust reaction questionable, possible escape infection
- 0= no visible infection in the plants.
- R= resistant. Necrotic areas with or without minute uredia present.
- MR= moderately resistant. Small uredia present surrounded by necrotic areas.
- MS= moderately susceptible. Medium sized uredia with no necrosis but possibly some distinct chlorosis.
- S= susceptible. Large uredia with no necrosis and little or no chlorosis.
- X= intermediate. Variable size uredia, some with necrosis and/or chlorosis.

## Fields Notes

Severity and reaction are combined to describe the percentage of infection and the reaction of the plant. For example:

- tMS= trace severity with a moderately susceptible response.  
10R= 10 percent severity with a response.  
10-40R= severity varied from 10 to 40 percent with a resistant response.  
20MR-MS= 20 percent severity with response varying from moderately resistant to moderately susceptible.

## Coefficient of Infection

The severity and response are converted to numerical values. This numerical value is called the coefficient of infection and can be used as an index for performance to rust. A high coefficient of infection, 50 or more, indicates susceptibility to the prevalent races of rust. A low coefficient of infection, 10 or lower, generally indicates adequate resistance to prevalent races.

In determining the coefficient of infection, values of 0 to 1 are assigned each response as follows:

<u>Response</u>	<u>Value</u>
0	0
VR & R	0.2
MR	0.4
X	0.6
MS	0.8
S & VS	1.0

The severity (percent of infection) is multiplied by the value assigned the response, and the product is the coefficient of infection. For example:

- 20R= 20 (severity) x 0.2 (value of response) = 4.0  
coefficient of infection.  
20S= 20 x 1.0 = 20.0 coefficient of infection.

To estimate the percentage of head infection by Puccinia striiformis (stripe or yellow rust), the average percent of infected florets is estimated. Percentage head infection ranges from 0 to 100%.

**TABLE 1** Preliminary Summary table of the "4th International Spring Wheat Yield Nursery" 1967-68. Regional mean yield in kilos/ha and rank.

Entry No.	Variety or cross	Origin	I R R I G A T E D A N D R A I N F E D								I R R I G A T E D							
			Over all mean 43 stations		AMERICAS 10 stations		AFRICA 9 stations		ASIA 24 stations		MEXICO 1 station		USA 2 stations		AFRICA 6 stations		ASIA 16 stations	
			Yield kg/ha	Rank	Yield kg/ha	Rank 1/	Yield kg/ha	Rank 3/	Yield kg/ha	Rank 2/	Yield kg/ha	Rank 1/	Yield kg/ha	Rank	Yield kg/ha	Rank 3/	Yield kg/ha	Rank 2/
35	Penjamo 62	Mex.	4092	1	4043	1	3570	8	3829	5	4120	6	4214	5	4236	5	3993	5
33	Super X	Mex.	3874	2	3446	17	3614	5	4071	2	4448	2	4018	15	4224	8	4261	2
8	Siete Cerros	Mex.	3817	3	3481	15	3642	4	4078	1	4228	5	4190	6	4218	10	4279	1
7	Pitic 62	Mex.	3793	4	3481	16	3851	2	3950	3	3422	15	5256	1	4525	3	4027	3
47	INIA 66	Mex.	3763	5	3720	6	3811	3	3940	4	4253	3	2869	43	4591	2	3917	6
3	Son 64 x Kl Rend	Arg.	3589	6	3518	12	3434	13	3745	6	4592	1	4170	7	4054	14	4017	4
23	Lerma Rojo 64 A	Mex.	3572	7	3399	18	3577	7	3708	7	3107	19	2907	42	4291	4	3839	9
9	Noroeste 66	Mex.	3542	8	3315	21	3508	10	3703	8	3444	14	3398	29	4227	7	3885	7
41	Crespo 63	Col.	3518	9	3900	4	3471	11	3374	15	2950	23	4067	9	4161	11	3463	17
38	LR 64 x Son 64	Mex.	3487	10	3794	7	3584	6	3377	14	3830	11	2951	41	4229	6	3509	16
31	Son 64 x Sk <sub>P</sub> -LR 64 A	Arg.	3470	11	3202	27	3912	1	3467	12	4031	8	4219	4	4689	1	3698	10
46	Son 64 x TzPP-Nai 60 (B)	Arg.	3459	12	3497	5	2894	35	3553	10	3819	12	4055	10	3299	40	3696	11
18	Huelquen	Arg.	3452	13	3780	8	3319	15	3544	11	2848	27	4108	8	3922	16	3761	13
4	Nainari 60	Mex.	3433	14	3506	14	3563	9	3405	13	2931	24	4507	2	4118	13	3651	12
45	Son 64 x TzPP-Nai 60 (A)	Arg.	3425	15	3341	26	3068	22	3679	9	3939	9	4430	3	3511	30	3856	8
25	Tobari 66	Mex.	3414	16	3976	2	3183	18	3327	18	3163	18	3818	16	3791	18	5352	20
14	Azteca F 67	Mex.	3398	17	3957	3	3052	25	3345	17	3680	13	3850	15	3695	22	3419	19
22	Napo 63	Col.	3325	18	3741	9	3084	21	3297	19	3379	16	3182	32	3617	25	3556	14
13	Norteno M 67	Mex.	3311	19	3727	10	3065	24	3140	22	4233	4	2637	48	3939	15	3416	15
26	VZ 133 Mara 3xFn-K58-N	Italy	3222	20	2903	29	3244	17	3368	16	2994	21	3319	30	3737	19	3435	18
34	Bonza 63	Col.	3190	21	3515	13	3108	19	3048	30	2564	38	3472	26	3584	26	3103	34
36	CIANO F 67	Mex.	3171	22	3701	11	2882	17	3096	25	3835	10	3760	18	3427	33	3162	28
43	Yaqui 50	Mex.	3159	23	2490	19	3066	23	3154	20	2838	28	3047	36	3621	24	3267	23
32	Sonora 64	Mex.	3125	24	3253	23	3044	20	3122	23	4102	7	3517	25	3727	20	3235	26
2	Nariño 59	Col.	3102	25	3272	22	2959	29	3146	21	2996	20	3529	24	3468	32	3228	25
37	Jaral 66	Mex.	3062	26	3224	25	2899	34	3094	26	2855	26	3793	17	3373	36	3146	29
40	C-271	Pak.	3057	27	2773	32	3460	12	3062	28	2414	41	3244	31	4142	12	3100	35
20	Centrifen	Chile	3046	28	3333	20	2873	38	3029	31	2727	32	3624	21	3398	34	3140	30
39	Bonza 55	Col.	3034	29	3241	24	2851	39	3055	29	2592	37	3947	14	3323	39	3114	32
19	Tacuari	Arg.	3006	30	3173	28	2911	32	3016	32	2902	25	3466	27	3334	38	3200	27
1	Carazinho	Brazil	2921	31	2575	38	2978	27	3078	27	1985	45	3753	19	3519	29	3337	21
6	Gabo	Aust.	2918	32	2742	35	3392	14	2832	37	2427	40	3691	20	3861	17	3136	33
24	C-306	India	2897	33	2407	43	2993	26	3100	24	2622	36	2959	40	3625	23	3244	24
30	Kl Pet x Rafaela	Arg.	2810	34	2680	36	2796	40	2901	35	2992	22	3008	50	3241	42	3029	37
42	Crim	USA	2805	35	2469	41	2927	37	2931	33	1667	46	3139	34	3391	35	3295	33
17	Pakistan 5725	Pak.	2787	36	2748	34	3272	16	2659	43	3266	17	3086	35	4222	9	2761	43
29	Giza 139	Egypt	2766	37	2853	31	2776	41	2743	40	2814	29	3590	23	3193	43	2817	41
11	Giza 144	Egypt	2758	38	2630	37	2966	28	2781	40	2739	30	3592	22	3554	28	3126	31
44	NP 880	India	2728	39	2716	42	2953	30	2786	39	2240	44	4032	12	3493	31	2804	42
49	Gaboto	Arg.	2722	40	2452	47	2669	44	2925	34	2259	43	3430	28	3084	44	3075	38
27	Buck Manantiales	Arg.	2716	41	2407	44	2886	36	2825	38	768	47	4079	11	3575	27	3020	39
10	C-273	Pak.	2666	42	2471	40	2768	42	2763	41	2702	33	2491	49	3356	37	2821	40
16	NP 852	India	2616	43	2246	45	2409	45	2883	36	2648	35	2778	45	2845	45	3309	22
15	Chris	USA	2575	44	2895	30	2261	46	2616	45	2694	34	3004	39	2573	46	2744	44
28	C-591	India	2550	45	2209	46	2728	43	2653	44	2495	39	2670	47	3251	41	2703	45
21	C-518	India	2512	46	2347	44	2905	33	2476	46	2392	42	2846	44	3702	21	2858	46
5	Justin	USA	2119	47	2201	48	1836	47	2219	47	676	48	3028	38	2047	47	2208	48
48	Selkirk	Can.	2064	48	2207	47	1753	48	1839	49	583	49	2715	46	2000	48	2018	47
12	Thatcher	USA	1919	49	2138	49	2138	49	1643	49	1951	48	2739	31	3178	33	1919	49
Station mean yield			3097		3104		3050		3136		2978		3045		3611		3314	

1/ Includes average yields of two sowing dates from CIANO, Mexico.

2/ Includes average yields of two sowing dates from Portugal in Europe.

3/ Includes average yields of two plantings, one with high and one with normal fertilization

TABLE 1-B Preliminary Summary of the "4th International Spring Wheat Yield Nursery" 1967-68. Regional mean yield in kilos/ha and rank.

Entry No.	Variety or cross	Origin	R E G I O N A L										A S I A	
			M E X I C O		U S A		C A N A D A		C O L O M B I A		A F R I C A		A S I A	
			Yield	Rank	Yield	Rank	Yield	Rank	Yield	Rank	Yield	Rank	Yield	Rank
1	Carazinho	Brazil	1327	41	3006	40	3800	9	810	45	1716	30	2589	37
2	Nariño 59	Colombia	2960	20	3053	39	3138	24	4723	13	1770	26	2990	20
3	Sonora 64 x K1 Rend	Argentina	1967	31	3705	11	2761	30	3357	23	1989	13	3230	12
4	Nainari 60	Mexico	2360	26	3471	27	5219	2	3340	24	2266	4	2940	26
5	Justin	USA	2325	27	2633	46	3240	23	1023	40	1344	43	2240	44
6	Gabo	Australia	1182	42	3577	29	3670	13	1107	38	2299	1	2265	43
7	Pitic 62	Mexico	877	43	4189	1	5253	1	1357	36	2277	3	3804	1
8	Siete Cerros	Mexico	1997	30	4032	5	3972	6	1393	35	2299	2	3699	3
9	Noroeste 66	Mexico	2874	21	3484	26	2777	29	3800	17	1831	22	3359	7
10	C-273	Pakistan	1725	33	2799	47	2201	46	2750	28	1395	41	2594	35
11	Giza 144	Egypt	1835	32	2838	43	3251	21	827	44	1596	36	2129	46
12	Thatcher	USA	2250	29	2719	44	3584	15	567	47	1000	49	2157	45
13	Norteno M 67	Mexico	4132	6	3511	22	2874	27	5540	6	1025	48	2999	18
14	Azteca F 67	Mexico	4347	4	3682	13	2616	34	6110	2	1552	37	3205	14
15	Chris	USA	3114	17	2565	48	3703	11	2823	26	1535	38	2373	41
16	NP 852	India	1384	39	2872	42	1491	49	983	41	1392	42	2079	47
17	Pakistan 5725	Pakistan	797	45	3560	21	2443	41	3360	22	1056	46	2465	39
18	Huelquen	Argentina	4012	9	3661	15	4343	4	4317	14	1881	17	3135	15
19	Tacuari	Argentina	3290	15	3362	32	3552	16	1950	31	1923	15	2669	32
20	Centrifon	Chile	2642	23	3410	31	2686	33	5757	5	1647	33	2819	29
21	C-518	India	377	47	3559	20	2341	43	1540	34	1046	47	2321	42
22	Napo 63	Colombia	4512	3	3348	33	2917	25	6043	3	1838	21	2807	30
23	Lerma Rojo 64 A	Mexico	3555	12	4066	4	3245	22	2800	27	1910	16	3460	6
24	C-306	India	532	46	3300	35	2083	47	2207	29	1517	40	2828	28
25	Tobari 66	Mexico	4785	2	3970	8	3471	17	4823	12	1765	27	3280	11
26	VZ 133 Mara 3 x Fn-K58-N	Italy	1462	38	3488	25	3326	20	3590	20	2094	7	3242	10
27	Buck Manantiales	Argentina	297	48	3751	10	3956	7	977	42	1276	44	2457	40
28	C-591	India	267	49	3081	38	2449	40	1743	32	1523	39	2558	38
29	Giza 139	Egypt	1499	37	3340	12	2578	36	2993	25	1803	23	2064	48
30	K1 Pet x Rafaela	Argentina	2384	25	3002	37	2077	48	3627	19	1757	28	2659	33
31	Son 64 x SkE-LR 64 A	Argentina	1354	40	3996	16	3671	12	350	48	2098	6	3030	17
32	Sonora 64	Mexico	2308	28	4116	3	2804	28	773	46	1618	34	2908	27
33	Super X	Mexico	1705	34	4135	2	4047	5	1107	39	2190	5	3710	2
34	Bonza 63	Colombia	3264	16	3494	23	4349	3	5233	9	1996	11	2944	24
35	Penjamo 62	Mexico	3317	14	3854	9	3778	10	5833	4	2015	10	3519	5
36	CIANO F 67	Mexico	4069	8	3465	28	2400	42	4890	10	1608	35	2972	22
37	Jaral 66	Mexico	3539	13	3672	14	2508	38	1567	33	1795	24	2994	19
38	Lerma Rojo 64 x Sonora 64	Mexico	4817	1	3493	24	2713	31	5350	7	2078	8	3128	16
39	Bonza 55	Colombia	2982	19	3329	34	3859	8	3767	18	1751	29	2945	23
40	C-271	Pakistan	820	44	3655	17	2524	37	3560	21	1868	18	2990	21
41	Crespo 63	Colombia	4170	5	3643	18	3385	19	6217	1	1861	19	3207	13
42	Crim	USA	2525	24	2951	41	3455	18	190	49	1845	20	2590	36
43	Yaqui 50	Mexico	3967	10	3459	30	2341	44	4293	15	1771	25	2941	25
44	NP 880	India	3025	18	2397	49	721	50	4233	16	1693	32	2751	31
45	Son 64 x TzPP-Nai 60 (A)	Argentina	1672	35	3628	19	2249	45	2190	30	2032	9	3344	8
46	Son 64 x TzPP-Nai 60 (B)	Argentina	3564	11	3891	7	2696	32	5250	8	1949	14	3285	9
47	INIA 66	Mexico	4077	7	4011	6	2481	39	4883	11	1990	12	3544	4
48	Selkirk	Canada	2752	22	2669	45	2906	26	1267	37	1177	45	1950	49
49	Gaboto	Argentina	1597	36	3185	36	2610	35	893	43	1701	31	2642	34
Station mean yield			2501		3430		3072		3022		1742		2874	

1/Includes average yields of two sowing dates from Portugal in Europe.

TABLE 2. Preliminary Yield Information from the "4th International Spring Wheat Yield Nursery" for 1967-68

Entry No.	Variety or cross	WEST PAKISTAN										TURKEY							
		IRRIGATED										RAINFED							
		Tandojam		Khanpur		Lyalpur		Tarnab		Av.		Adapazari		Eskisehir		Izmir		Av.	
kg/ha	1/	kg/ha	1/	kg/ha	1/	kg/ha	1/	kg/ha	1/	kg/ha	1/	kg/ha	1/	kg/ha	1/	kg/ha	1/	kg/ha	1/
1	Carazinho	3442	34	2173	20	2392	33	1307	38	2329	34	3867	31	1150	33	2858	37	2625	34
2	Nariño 59	3567	32	1953	34	2293	36	1468	30	2320	35	4477	14	937	40	3267	22	2894	23
3	Son 64 x Kl Rend	4742	3	1813	38	4883	6	2213	14	3413	7	4067	26	1177	29	3430	12	2891	25
4	Nainari 60	4189	10	2320	11	2293	37	1367	32	2542	26	4867	9	1477	14	3614	6	3319	7
5	Justin	2425	47	1707	45	1713	48	676	48	1630	47	2723	46	1453	15	2955	30	2377	42
6	Gabo	4022	17	2113	25	1973	43	693	47	2200	39	4133	24	727	45	3275	20	2725	30
7	Pitic 62	4189	11	2527	2	2571	30	2975	5	3066	14	4533	13	1900	2	3869	1	3433	4
8	Siete Cerros	4464	5	2863	1	4246	11	3483	3	3764	2	4290	22	1593	11	3433	11	3105	12
9	Noroeste 66	4180	13	1680	46	4724	7	4144	1	3682	4	5100	5	533	46	3330	15	2988	19
10	C-273	2649	46	1907	37	3507	20	1285	39	2337	32	3690	35	800	42	2625	46	2372	44
11	Giza 144	3980	18	2517	3	2012	42	1244	41	2438	29	2700	47	1100	36	3025	27	2275	46
12	Thatcher	1474	50	737	50	1217	50	609	49	1009	48	2390	50	1750	3	3119	26	2420	41
13	Norteño M 67	3851	22	1723	44	4446	9	2622	10	3161	13	5133	4	320	50	2939	31	2797	29
14	Azteca F 67	3962	19	2307	12	3268	21	1916	20	2863	17	3867	32	1487	12	3425	13	2927	21
15	Chris	3791	24	1957	33	1755	47	1206	43	2177	43	3010	42	1137	34	2541	48	2229	48
16	NP 852	3618	29	2293	14	2790	28	1593	28	2574	24	3933	27	1170	30	2413	50	2505	38
17	Pakistan 5725	2769	44	1990	32	3229	22	1873	23	2465	28	2967	44	437	47	3311	17	2238	47
18	Huelquen	3821	23	2420	7	3149	23	1630	27	2755	20	4343	20	1600	10	3547	7	3163	10
19	Tacuari	4300	7	2080	28	2473	31	1427	31	2570	25	3523	38	1693	6	2736	42	2651	32
20	Centrifon	3537	33	1570	49	2452	32	1647	26	2302	36	3643	37	1003	39	2650	45	2432	40
21	C-518	2655	45	2217	18	1773	46	1324	36	1992	45	3023	41	377	48	2511	49	1971	50
22	Napo 63	4022	16	2160	22	2990	24	1490	29	2666	22	4467	15	1053	37	3133	25	2884	26
23	Lerma Rojo 64 A	4354	6	1627	48	4207	12	3176	4	3341	8	4290	23	1200	28	3539	8	3009	15
24	C-306	3905	20	2203	19	2272	38	1145	44	2381	31	3890	30	1400	18	3278	19	2856	27
25	Tobari 66	3621	27	2053	29	4046	14	2566	11	3572	5	3677	36	1717	5	2919	33	3837	1
26	VZ 133 Mara 3xFn-K58-N	2993	42	1663	47	3747	17	2400	12	2701	21	4743	10	1727	4	3008	28	3159	11
27	Buck Manantiales	2401	48	2460	6	2353	34	1707	25	2230	38	2500	48	1960	1	3275	21	2579	35
28	C-591	3442	35	2150	23	1893	45	1264	40	2187	41	4333	21	787	43	2811	41	2644	33
29	Giza 139	2939	43	1923	36	2272	39	758	46	1973	46	2957	45	1210	26	2844	40	2337	45
30	Kl Pet x Rafaela	3612	31	1803	39	1973	44	1350	35	2185	42	3477	39	1320	21	2703	44	2500	39
31	Son 64 x Sk <sub>E</sub> -LR 64 A	4300	8	2370	9	4285	10	1955	18	3228	12	4400	18	1320	22	3386	14	3035	14
32	Sonora 64	3732	25	2290	15	4964	5	2017	17	3251	10	4457	17	1303	23	3453	10	3071	13
33	Super X	4096	14	2297	13	5361	2	3617	2	3843	1	4977	8	1683	7	3328	16	3329	6
34	Bonza 63	4234	9	1730	42	2850	27	1712	24	2632	23	3900	29	1483	13	3297	18	2893	24
35	Penjamo 62	4694	4	2470	5	3848	16	2751	8	3441	6	5200	3	1387	20	3636	5	3408	5
36	CIANO F 67	3388	36	2010	30	4028	15	1916	21	2836	18	5033	7	1027	38	3664	4	3241	8
37	Jaral 66	3621	28	2010	31	3549	19	1910	22	2773	19	3943	33	737	44	2914	34	2531	36
38	LR 64 x Son 64	4186	12	1947	35	3747	18	2179	15	3015	15	5357	2	360	49	3153	24	2956	20
39	Bonza 55	4076	15	2120	24	1414	49	1367	33	2244	37	4467	16	1670	8	2863	36	3000	16
40	C-271	3053	41	2093	27	2870	26	2153	16	2542	27	4357	19	1153	32	3480	9	2997	17
41	Crespo 63	3905	21	2393	8	2990	25	2245	13	2883	16	4610	12	1643	9	2728	43	2993	18
42	Crim	3334	37	2477	4	2652	29	1227	42	2423	30	2990	42	1287	24	2844	39	2373	43
43	Yaqui 50	3334	38	2337	10	2353	35	1324	37	2337	33	4677	11	1160	31	2855	38	2897	22
44	NP 880	3170	40	1773	41	2234	40	1124	45	2075	44	3843	34	1253	25	2880	35	2659	31
45	Son 64 x TzPP-Nai 60 (A)	3672	26	2277	16	5104	4	1948	19	3250	11	6023	1	1127	35	3694	2	3615	3
46	Son 64 x TzPP-Nai 60 (B)	3618	30	2103	26	4665	8	2853	6	3310	9	3910	28	1403	17	3211	23	2841	28
47	INIA 66	4754	2	1777	40	5600	1	2627	9	3690	3	5090	6	837	41	3680	3	3203	9
48	Selkirk	2123	49	1730	43	4126 <sup>4</sup>	13	366	50	----	----	2467	49	1210	27	2558	46	2078	49
49	Gaboto	3223	39	2173	21	2033	41	1367	34	2199	40	3190	40	1400	19	2933	32	2508	37
50	Klein Rendidor or Local variety	4847 <sup>2/</sup>	1	2253	17	5203 <sup>2/</sup>	3	2814 <sup>2/</sup>	7	----	----	4090	25	1443	16	2994	29	3789	2

1/ Rank 2/ See Table No. 3 for name of local variety 3/ No data available 4/ Data of PJ-GB55 x 271 (used instead of Selkirk)

TABLE 2. Preliminary Yield Information from the "4th International Spring Wheat Yield Nursery" for 1967-68 (continued)

Entry No.	Variety or cross	I N D I A										I R A N					
		I R R I G A T E D										Rainfed		Irrigated			
		Pusa		Ludhiana		Pantnagar		New Delhi		Powarkheda		Ay.		Gorgan		Ahwaz	
kg/ha	1/	kg/ha	1/	kg/ha	1/	kg/ha	1/	kg/ha	1/	kg/ha	1/	kg/ha	1/	kg/ha	1/		
1	Carazinho	4000	37	1123	28	2543	27	2907	36	1453	16	2405	32	3137	28	2487	30
2	Nariño 59	4132	36	789	42	3157	22	3769	22	1431	17	2656	26	2960	31	1933	43
3	Son 64 x Kl Rend	5332	7	1630	6	4033	7	5167	7	1540	13	3540	7	2867	34	1587	50
4	Nainari 60	4800	19	1630	7	2710	24	4092	20	1269	25	2900	21	3767	18	2967	14
5	Justin	1868	49	478	48	923	48	1398	49	752	39	1084	48	2043	50	1677	49
6	Gabo	5332	8	543	47	1067	46	3769	23	252	45	2193	39	2087	49	2853	17
7	Pitic 62	4532	25	1195	24	4510	2	3982	21	1024	32	3049	17	4377	13	3420	3
8	Siete Cerros	5332	9	1558	10	3657	14	5490	3	1928	2	3593	4	4177	14	3510	2
9	Noroeste 66	5332	10	1738	3	4323	4	5384	4	1185	28	3592	5	4827	2	2833	19
10	C-273	4400	30	832	37	2000	34	3123	35	378	44	2147	40	2827	36	2687	21
11	Giza 144	5200	13	1015	31	1243	42	2907	37	1185	29	2310	34	2150	47	2500	29
12	Thatcher	800	50	159	50	310	50	646	50	123	47	408	49	2187	46	1920	44
13	Norteño M 67	5068	15	1484	12	4300	5	4415	16	1066	31	3267	11	4567	5	2653	22
14	Azteca F 67	4532	26	1484	13	3233	20	4844	12	1495	15	3118	15	4437	11	2800	20
15	Chris	3600	41	906	33	2390	30	2583	42	1560	10	2208	38	2867	35	2043	38
16	NP 852	4932	17	1267	20	2377	31	4498	18	1195	27	2794	23	2117	48	2177	35
17	Pakistan 5725	3868	39	876	34	1190	45	3230	32	119	48	1857	42	2903	32	2867	16
18	Huelquen	5600	3	1123	29	2667	25	4198	19	2012	1	3120	14	4487	9	1733	48
19	Tacuari	4532	27	797	40	2500	29	3336	30	1605	8	2554	28	3187	27	2300	32
20	Centrifon	4668	24	1267	21	3267	18	3659	26	1398	19	2852	22	3867	16	2920	15
21	C-518	3200	46	869	36	1233	44	2583	43	23	50	1582	46	2900	33	3077	12
22	Napo 63	4268	34	1232	22	2967	23	4738	13	1394	20	2920	20	3667	20	3387	4
23	Lerma Rojo 64 A	5332	11	1593	8	4210	6	4521	14	1356	21	3402	8	4453	10	2453	31
24	C-306	4533	28	1195	25	1933	36	3336	31	985	35	2396	33	3243	26	3367	5
25	Tobari 66	4800	20	1341	15	3877	8	3769	24	1301	24	3018	19	4500	8	2033	39
26	VZ 133 Mara 3xFn-K58-N	4268	35	1456	14	3190	21	3769	25	1185	30	2774	24	3720	19	3253	8
27	Buck Manatiales	3600	42	876	35	1990	35	2154	47	895	37	1903	41	2767	38	2520	28
28	C-591	3600	43	658	45	1790	37	2261	46	119	49	1686	45	2583	42	2153	36
29	Giza 139	2932	47	797	41	1310	41	2800	40	765	38	1721	44	3270	25	2620	23
30	Kl Pet x Rafaela	3868	40	1310	19	3367	16	3553	27	1011	34	2622	27	2567	43	2000	40
31	Son 64 x Sk <sub>E</sub> -LR 64 A	4532	29	1558	11	3290	17	4951	10	1024	33	3071	16	3610	21	2543	26
32	Sonora 64	5068	16	1667	5	3667	13	5167	8	688	42	3251	12	3817	17	2267	33
33	Super X	5600	4	1884	2	4790	1	5707	1	1334	23	3863	1	4810	3	2243	34
34	Bonza 63	4400	31	1167	26	2510	28	2584	44	1702	7	2473	30	2727	39	1943	42
35	Penjamo 62	5868	1	1919	1	3867	9	5597	2	1356	22	3721	2	4517	7	3343	7
36	CIANO F 67	4800	21	1375	16	3257	19	4951	11	720	41	3021	18	3953	15	3600	1
37	Jaral 66	4932	13	1341	13	3757	12	4521	15	1573	9	3225	13	4553	6	1767	47
38	LR 64 x Son 64	5868	2	1593	9	3833	10	4415	17	969	36	3336	9	4653	4	2843	18
39	Bonza 55	4400	32	832	38	1790	38	2367	45	1808	4	2239	36	2587	41	1777	46
40	C-271	3468	44	1015	32	1010	47	3230	33	171	46	1779	43	2817	37	3367	6
41	Crespo 63	4800	22	1232	25	2600	26	3553	28	1540	14	2745	25	3443	24	3077	13
42	Crim	3468	45	1021	30	1643	39	3230	34	1786	5	2230	37	2437	44	2567	25
43	Yaqui 50	5200	14	760	43	2290	33	2907	38	1421	18	2516	29	2617	40	2533	27
44	NP 880	4000	38	689	44	2343	32	3446	29	1560	11	2408	31	3120	29	1967	41
45	Son 64 x TzPP-Nai 60 (A)	5468	5	1738	4	3457	15	5274	6	1915	3	3570	6	3610	22	3187	9
46	Son 64 x TzPP-Nai 60 (B)	4800	23	1449	15	3823	11	5061	9	1237	26	3274	10	4433	12	2120	37
47	INIA 66	5332	12	1158	27	4510	3	5384	5	1744	6	3626	3	5477	1	3120	11
48	Selkirk	2132	48	174	49	910	49	2690	41	446	43	1570	47	2433	45	1900	45
49	Gaboto	4400	33	832	39	1557	40	2907	39	1560	12	2251	35	3120	30	2610	24
50	Klein Rendidor or Local variety	5468 <sup>2/</sup>	6	615	46	1243 <sup>2/</sup>	43	2154	48	743	40	----	--	3583	23	3153	10

1/ Rank

2/ See Table No. 3 for name of local variety

TABLE 2. Preliminary Yield Information from the "4th International Spring Wheat Yield Nursery" for 1967-68 (continued)

Entry No.	Variety or cross	LEBANON				IRAQ					SYRIA		JORDAN		AFGHANISTAN		ISRAEL		CYPRUS		NEPAL		
		Housh Sneid		Tel Amara		Abu Ghraib					Damascus		Deir Alla		Darul Amon		Beit Dagan		Athienou		Kathmandu		
		Rainfed	Irrigated	Rainfed	Irrigated	Irrigated		Irrigated		Irrigated	Irrigated	Irrigated	Irrigated	Irrigated	Irrigated	Rainfed	Rainfed	Rainfed	Rainfed	Irrigated	Irrigated		
kg/ha	1/	kg/ha	1/	kg/ha	1/	kg/ha	1/	kg/ha	1/	kg/ha	1/	kg/ha	1/	kg/ha	1/	kg/ha	1/kg/ha	1/	kg/ha	1/			
1	Carazinho	1257	33	4433	41	3793	13	3433	35	3613	23	4627	18	3633	17	6433	7	4457	36	2177	11	6551	3
2	Nariño 59	1567	9	4720	27	3143	38	3433	36	3288	37	4027	32	3710	15	6233	10	5130	24	2451	2	5120	14
3	Son 64 x Kl Rend	1327	27	6167	3	4453	1	4633	4	4543	2	4887	14	4277	2	6777	3	6427	3	2287	3	4151	25
4	Nainari 60	1420	18	5117	16	3620	16	3983	20	3801	17	4943	11	3953	11	6267	9	5473	17	2099	15	6555	2
5	Justin	957	49	4383	44	2593	48	2527	48	2560	48	3667	45	1967	45	5887	14	4110	40	1114	47	2893	44
6	Gabo	1400	20	4920	21	3820	12	4083	17	3951	12	4883	27	4077	7	5057	32	2940	48	1418	44	3800	31
7	Pitic 62	1913	2	5150	15	4183	4	3753	26	3968	11	5900	1	4857	1	7477	1	6533	2	2690	1	6222	4
8	Siete Cerros	1647	3	6686	1	4187	3	4250	11	4218	6	5437	3	4033	8	6367	8	6317	6	2199	9	5253	10
9	Noroeste 66	1073	37	4917	22	3210	33	4137	15	3673	25	5350	4	4200	3	5187	29	6297	7	1689	39	3520	38
10	C-273	1003	46	4650	30	3170	36	3317	38	3243	40	3783	41	3077	30	4267	45	3983	42	1944	26	2933	43
11	Giza 144	1063	40	4467	37	3317	29	3470	34	3383	33	4703	17	3720	14	5010	35	3730	45	1699	37	4653	16
12	Thatcher	1263	32	4133	47	1867	50	2000	50	1933	49	4527	20	2110	44	5043	33	2300	50	533	49	3631	37
13	Norteño M67	1070	38	4753	26	3300	31	4200	12	3750	19	4410	23	2633	39	3/	3/	5550	15	2041	23	3729	35
14	Azteca F67	1547	10	4783	25	3587	19	4010	19	3798	18	4417	22	2510	41	4733	39	5340	20	1918	28	4235	23
15	Chris	1203	34	4033	48	2977	45	2933	47	2955	45	3653	46	3067	32	4943	36	3920	43	982	48	3258	39
16	NP 852	1037	42	4600	32	3627	15	3150	45	3388	31	3887	38	3400	24	3810	16	3783	44	1415	45	5347	9
17	Pakistan 5725	1060	41	4467	35	3010	41	3833	22	3421	29	4000	34	4177	4	3943	46	4243	38	1851	34	1498	50
18	Huelquen	1540	11	4183	46	3517	22	3587	29	3552	25	5160	6	4133	6	6720	4	5190	22	1860	32	5164	12
19	Tacuari	1340	25	4483	36	3060	39	3483	33	3271	39	5000	8	3333	25	5810	17	4687	30	1521	40	5164	29
20	Centrifon	1317	28	4870	23	3183	35	3153	44	3168	44	3950	10	2700	37	5310	23	5787	13	2241	5	3831	30
21	C-518	953	50	4387	43	3603	16	3053	47	3328	36	3476	48	2657	38	4833	38	3667	46	1696	38	2520	46
22	Napo 63	1977	1	5767	7	3450	25	3253	42	3351	34	4943	12	2200	43	5543	19	5183	23	2203	8	6649	1
23	Lerma Rojo 64A	1307	30	6133	4	3937	9	4200	13	4068	9	4783	15	3643	16	5153	30	5783	14	2225	6	4587	19
24	C-306	1613	5	5900	5	3720	14	3300	39	3510	26	4150	29	3477	22	5200	28	4110	41	1805	35	4524	20
25	Tobari 66	1003	47	4487	35	3433	27	4310	9	3871	15	3443	49	3633	18	5243	27	5913	11	2041	24	3031	41
26	VZ 133 Mara 3 x Fn-K58-N	1503	13	5337	12	3583	20	4270	10	3926	13	5227	5	3633	19	6053	12	4603	32	2048	21	2360	49
27	Buck Manantiales	1580	7	4677	28	2893	46	3493	30	3193	43	4193	28	2777	35	7210	2	3167	47	1376	46	5138	13
28	C-591	1390	21	4927	20	3353	28	3753	27	3553	24	3777	42	3477	23	4387	44	4153	39	1922	27	2942	42
29	Giza 139	1467	15	4660	29	3450	26	3487	32	3468	28	4143	30	3610	20	5020	34	4603	33	1893	29	4395	21
30	Kl Pet x Rafaela	1383	22	5237	13	3010	42	3767	25	3388	32	3943	36	2710	36	4687	39	4583	34	2112	14	4293	23
31	Son 64 A x Sk <sub>E</sub> -LR 64A	1620	4	5343	11	3870	11	4343	8	4106	8	4577	19	4000	10	5277	25	4943	28	1466	41	4649	17
32	Sonora 64	1030	43	4467	39	3477	24	3877	21	3677	21	3693	44	1400	49	4167	46	5823	12	1860	33	2382	48
33	Super X	1583	6	6227	2	4217	2	5033	1	4625	1	5543	2	4033	9	6567	6	6383	4	2070	19	3893	28
34	Bonza 63	1427	17	4567	33	2583	49	3210	43	2896	46	4503	21	3233	28	5920	13	5227	21	1770	16	3907	27
35	Penjamo 62	1357	23	5173	14	4167	5	4520	6	4343	4	5133	7	2953	33	5633	18	6177	9	2086	17	4595	18
36	CIANO F67	1030	44	4550	34	3033	40	3637	28	3335	35	3093	50	1853	46	5120	31	5083	25	2125	13	2422	47
37	Jaral 66	1340	26	4610	31	3200	34	3270	41	3235	41	3777	43	1387	50	4520	42	5343	19	2186	10	3742	34
38	Lerma Rojo 64 x Sonora 64	1017	45	4443	40	3587	19	4200	14	3893	14	4100	31	2610	40	5443	22	6343	5	2044	22	3689	36
39	Bonza 55	1307	31	4793	24	3010	43	4720	3	3865	16	4927	13	3900	13	5287	24	4960	27	1886	31	4351	22
40	C-271	1497	14	5440	10	4010	8	4067	18	4038	10	4387	26	4167	5	5443	21	5347	18	1780	36	2764	45
41	Crespo 63	1540	12	5050	18	3220	32	3787	24	3503	27	4737	16	3077	31	6633	5	5500	16	2086	18	4027	26
42	Crim	1570	8	5040	19	3520	21	3300	40	3410	30	4983	9	2787	34	4443	43	4620	31	1453	43	5404	7
43	Yaqui 50	1347	24	5633	8	3277	31	4127	16	3702	20	4017	33	1753	47	6187	11	4473	35	2216	7	6093	5
44	NP 880	990	48	3677	49	2950	45	3493	31	3221	42	3620	47	2387	42	3833	47	4457	37	2277	4	5404	8
45	Son 64 x TzPP-Nai 60 (A)	1153	35	5073	17	3927	10	4500	7	4213	7	3970	35	3243	27	5267	26	5987	10	1973	25	5529	6
46	Son 64 x TzPP-Nai 60 (B)	1443	16	5607	9	4133	6	4533	5	4333	5	3943	37	3953	12	5853	15	6607	1	2132	12	3075	40
47	INIA 66	1067	39	5877	6	4027	7	4870	2	4448	3	3853	40	3253	26	4920	37	6127	8	2057	20	3787	33
48	Selkirk	1077	36	3190	50	2860	49	2337	49	2598	47	3867	39	1743	48	3/	3/	2823	49	400	50	3800	32
49	Gaboto	1403	19	4310	45	3167	37	3377	37	3272	38	4400	24	3143	29	5500	20	4697	29	1889	30	4711	15
50	Klein Rendidor or local var.	1317 <sup>2/</sup>	29	4427 <sup>2/</sup>	42	3500	23	3827	23	3663	22	4400 <sup>2/</sup>	25	3510	21	4587	41	5013 <sup>2/</sup>	26	1463	42	5191	11

1/ Rank 2/ See Table No. 3 for name of local variety 3/ No data available \*Two levels of Fertilization NF=Normal 40 Kg N, 30 Kg P<sub>2</sub>O<sub>5</sub> HF=High 80 Kg N, 30Kg P<sub>2</sub>O<sub>5</sub>



TABLE 2. Preliminary Yield Information from the "4th International Spring Wheat Yield Nursery" for 1967-68 (continued)

Entry No.	Variety or cross	EGYPT												TUNISIA		SUDAN				LIBYA		S.AFRICA		MOROCCO	
		Sakha		Bahtim				Irrigated		Ariana		Ed Damer		Khashm		Sedi Mesri		Zorda		Stellenbosch		Rabat			
		Irrigated		HF*	NF*		Av.			Rainfed	Irrigated	Irrigated	El Girba	Irrigated	Av.	Irrigated	Rainfed	Irrigated	Rainfed	Irrigated	Rainfed	Irrigated	Rainfed		
kg/ha	1/	kg/ha	1/	kg/ha	1/	kg/ha	1/	kg/ha	1/	kg/ha	1/	kg/ha	1/	kg/ha	1/	kg/ha	1/	kg/ha	1/	kg/ha	1/	kg/ha	1/		
1	Carazinho	4320	21	4823	36	5050	36	4731	31	2057	23	2500	30	2260	26	2380	29	4217	23	573	43	1460	30	2517	21
2	Nariño 59	4727	11	5077	34	4843	39	4882	28	2050	25	2130	44	1848	40	1889	45	3687	32	778	32	1963	16	2482	23
3	Sonora 64 x Kl Rend	4686	13	6490	14	6433	11	5870	12	2393	7	2167	42	1964	36	2065	41	4587	15	1240	6	2050	14	2333	29
4	Nainari 60	3977	28	6290	17	6057	20	5441	17	2553	3	3790	5	2728	7	3259	5	4667	10	1173	10	1320	33	3073	4
5	Justin	2703	46	2810	47	2940	47	2818	48	1447	47	1917	49	796	48	1356	49	1553	48	622	41	1607	26	1962	38
6	Gabo	3353	39	5560	27	6160	15	5024	25	2343	10	3633	8	2836	5	3234	6	5200	4	2071	1	283	50	2482	24
7	Pitic 62	4567	15	7193	4	6093	18	5951	11	2567	2	4617	1	2552	10	3634	2	4753	8	1227	7	1903	18	3037	5
8	Siete Cerros	4750	9	7023	8	6983	6	6252	6	2477	4	3033	15	2532	14	2782	11	4643	11	1227	8	563	44	3184	2
9	Noroeste 66	5043	5	7156	6	7160	4	6453	4	2190	18	2410	35	1952	37	2181	37	3477	37	1030	15	2393	4	2222	31
10	C-273	3637	33	4707	37	5023	38	4456	38	1773	40	3207	13	2364	49	2785	10	4033	27	524	44	520	46	1880	39
11	Giza 144	3117	41	5773	22	5473	29	4788	30	1497	45	2840	20	2580	12	2710	14	4103	25	475	47	990	36	2816	9
12	Thatcher	1993	50	2327	48	2783	48	2368	50	1457	46	3327	10	1016	47	2171	38	1390	49	471	49	597	42	1073	48
13	Nortefo M67	4870	7	6593	12	5190	33	5551	15	2350	9	2333	39	1940	38	2136	40	4410	20	475	43	2240	11	251	50
14	Azteca F67	3527	37	6067	18	6340	12	5311	22	2113	21	2527	26	2244	28	2385	28	2293	44	764	34	2867	1	1778	42
15	Chris	2777	44	3467	45	2750	49	2965	47	1113	50	2160	43	1664	45	1912	44	3377	40	1120	12	1813	22	2371	27
16	NP 852	2737	45	4673	40	4717	41	4042	44	1777	39	2450	33	2184	31	2317	31	2853	43	844	26	303	49	1556	46
17	Pakistan 5725	4693	12	6343	16	6267	13	5768	13	1727	41	3823	4	2456	16	3139	8	5433	3	662	38	537	45	778	49
18	Huelquen	5020	6	5727	24	5577	26	5441	18	1993	30	2660	24	2132	33	2396	27	4077	26	871	25	2263	9	2778	11
19	Tacuari	3670	32	4400	44	4493	43	4190	41	1843	35	2357	37	2228	30	2292	33	4310	22	1258	4	1883	19	2667	17
20	Centrifon	4460	18	5673	26	6017	22	5383	19	2053	24	2450	34	544	49	1497	48	3687	33	1036	18	957	39	1851	41
21	C-518	3403	38	5300	32	5393	31	4699	32	1320	48	3673	7	2896	4	3284	4	4487	18	484	46	763	40	1333	47
22	Napo 63	4370	20	5927	19	5643	25	5320	20	1883	32	2343	38	2252	27	2297	32	3533	35	1298	2	1253	34	2333	30
23	Lerma Rojo 64A	4743	10	6840	10	7006	5	6196	8	2100	22	2943	17	2328	21	2635	16	4543	26	1258	5	1633	25	2371	28
24	C-306	2610	47	5317	31	5767	23	4565	34	2033	26	3790	6	2652	11	3221	7	3787	31	813	29	1453	31	1704	44
25	Tohari 66	3617	34	5343	30	6050	21	5003	26	1807	37	2460	32	1832	42	2146	39	5110	5	822	27	2123	13	2667	18
26	VZ 133 Mara 3 x Fn-K58-N	3926	29	5873	20	5090	35	4963	27	2733	1	2967	16	2136	32	2551	22	5587	2	920	23	580	43	2629	19
27	Buck Manantiales	4237	23	5790	21	5210	32	5079	24	1577	44	2360	36	1768	44	2064	42	3510	36	511	45	2153	12	1740	43
28	C-591	3817	30	4523	43	5033	37	4458	37	1850	34	2093	46	2908	3	2500	24	3410	39	604	42	970	38	2073	35
29	Giza 139	2537	48	5367	29	5517	27	4474	35	2277	12	2217	41	2952	1	2584	20	3010	42	1133	11	750	41	2000	37
30	Kl Pet x Rafaela	3593	35	5433	28	5483	28	4836	29	2007	27	2057	47	1812	43	1934	43	3143	41	1191	9	1167	35	2073	36
31	Son 64 x SkE-LR64A	5417	2	6760	11	6517	10	6231	7	2457	5	4523	2	2940	2	3731	1	4760	7	738	35	1907	17	2740	12
32	Sonora 64	4553	16	7110	7	6210	14	5958	10	1883	33	2507	29	1864	39	2185	35	1970	46	1098	14	1873	20	2149	32
33	Super X	4783	8	7476	2	7276	3	6512	3	2337	11	2723	23	2232	29	2477	25	4677	9	822	28	400	48	3296	1
34	Bonza 63	3743	31	5067	35	4510	42	4440	39	2000	28	3227	12	1968	35	2597	19	5053	6	938	22	1523	28	2704	15
35	Penjamo 62	4617	14	7183	5	7460	1	6420	5	2270	14	2607	25	2660	8	2633	18	3583	34	1284	3	1543	27	3149	3
36	CIANO F67	4053	25	6467	15	5417	30	5312	21	2173	19	1983	48	2388	18	2185	36	1320	50	627	40	2363	6	1704	45
37	Jaral 66	4016	26	5733	23	5657	24	5135	23	1907	31	1917	50	1836	41	1876	46	2110	45	947	21	2340	7	2704	16
38	Lerma Rojo 64 x Sonora 64	5193	3	6940	9	6143	16	6092	9	2277	13	2127	45	2292	25	2209	34	4510	17	773	33	2397	3	2900	7
39	Bonza 55	2883	43	4650	41	4200	45	3911	46	1707	42	2893	12	2572	13	2732	12	4620	13	1058	17	1440	32	2816	10
40	C-271	4377	19	6540	13	6093	19	5670	14	2383	8	4243	3	2656	9	3449	3	4600	14	729	36	483	47	2149	33
41	Crespo 63	4183	24	5693	25	6590	8	5489	16	1843	36	2493	31	2312	22	2402	26	5667	1	1071	16	2190	10	2927	6
42	Crim	3067	42	4677	39	4477	44	4074	42	2000	29	3267	11	2468	15	2867	9	3933	28	813	30	1847	21	2740	13
43	Yaqui 50	3993	27	5183	33	4793	40	4656	33	2143	20	2790	21	2312	23	2551	23	4633	12	795	31	1640	23	2482	25
44	NP 880	3537	36	4707	38	5157	34	4467	36	2240	15	2523	27	2756	6	2639	15	3477	38	689	37	2297	8	2149	34
45	Son 64 x TzPP-Nai 60 (A)	4527	17	1657	50	6910	7	4365	40	2397	6	3157	14	2308	24	2732	13	3920	29	960	19	2370	5	2740	14
46	Son 64 x TzPP-Nai 60 (B)	4283	22	1756	49	6100	17	4046	43	2213	17	2740	22	2392	17	2566	21	3800	30	1115	13	2020	15	2518	22
47	INIA 66	5610	1	7516	1	6577	9	6568	2	2230	16	2923	18	2348	20	2635	17	4377	21	889	24	2787	2	2851	8
48	Selkirk	2017	49	2900	46	2410	50	2442	49	1173	49	2243	40	1096	46	1669	47	1700	47	467	50	1637	24	1890	40
49	Gaboto	3210	40	4583	42	3983	46	3925	45	1587	43	2510	28	2132	34	2321	30	4200	24	960	20	973	37	2556	20
50	Klein Rendidor	5170 <sup>2/4</sup>		7373 <sup>2/3</sup>		7433 <sup>2/2</sup>		6658	1	1787	38	3573 <sup>2/9</sup>		3/	3/	3/	3/	4420	19	640	39	1480 <sup>2/29</sup>		2444 <sup>2/26</sup>	

1/ Rank 2/ See Table No. 3 for name of local variety 3/ No data available \*Two levels of Fertilization NF=Normal 40 KgN, 30Kg P<sub>2</sub>O<sub>5</sub>; HF=High 80Kg N, 30Kg P<sub>2</sub>O<sub>5</sub>

TABLE 2. Preliminary Yield Information from the "4th International Spring Wheat Yield Nursery" for 1967-68 (continued)

Entry No.	Variety or cross	PORTUGAL						MEXICO						COLOMBIA							
		Elvas		Rainfed		CIANO		Irrigated		Toluca		El Batan		Tibaitatá							
		1st. date	2nd. date	Rainfed		1st. date	2nd. date	Irrigated		Rainfed		Rainfed		Rainfed							
kg/ha	1/	kg/ha	1/	kg/ha	1/	kg/ha	1/	kg/ha	1/	kg/ha	1/	kg/ha	1/	kg/ha	1/						
1	Carazinho	2043	48	2356	42	2200	47	2555	37	1985	42	2270	42	1877	33	777	43	1327	41	810	46
2	Nariño 59	2617	36	3004	26	2811	32	3252	17	2741	31	2996	20	4387	3	1533	36	2960	20	4723	14
3	Sonora 64 x Kl Rend	3507	15	3484	14	3496	13	4548	2	4637	4	4592	1	3060	17	873	42	1966	31	3357	24
4	Nainari 60	2503	39	3744	5	3124	23	2696	33	3167	19	2931	24	2743	22	1977	31	2360	26	3340	25
5	Justin	2307	43	2496	38	2402	43	804	48	548	49	676	48	2427	26	2223	27	2325	27	1023	41
6	Gabo	1863	50	2544	36	2204	46	2196	44	2659	33	2427	39	1170	39	1193	38	1181	42	1107	39
7	Pitic 62	4080	7	4340	1	4210	3	3000	21	3844	13	3422	15	760	44	993	39	1876	43	1357	37
8	Siete Cerros	5310	1	4332	2	4821	1	3815	8	4641	3	4228	5	1783	34	2210	28	1996	30	1393	36
9	Noroeste 66	3829	9	3552	9	3691	8	3752	9	3137	20	3444	14	2637	24	3110	19	2876	21	3800	18
10	C-273	2923	29	3552	10	3238	21	2874	29	2530	35	2702	32	2117	30	1333	37	1725	33	2750	29
11	Giza 144	2060	47	1632	48	1846	49	2674	34	2804	29	2739	30	1727	36	1943	33	1835	32	827	45
12	Thatcher	2473	40	3396	17	2935	27	174	50	174	50	174	50	2477	25	2023	30	2250	29	567	48
13	Norteño M67	3557	14	1812	47	2685	35	4152	4	4315	5	4233	4	3837	8	4427	5	4132	6	5540	6
14	Azteca F67	3726	10	3106	23	3413	14	3167	18	4193	7	3680	13	3833	9	4860	2	4346	4	6110	2
15	Chris	3080	27	2620	33	2850	30	2618	36	2770	30	2694	33	2877	19	3350	16	3113	17	2823	27
16	NP 852	1297	19	1544	50	1420	50	2433	39	2863	27	2648	34	810	43	1957	32	1383	39	983	42
17	Pakistan 5725	2633	34	2780	31	2707	34	3100	20	3433	17	3266	17	667	45	373	45	520	45	3360	23
18	Huelquen	3640	12	2012	46	2826	31	2630	35	3067	21	2848	27	3650	10	4373	7	3861	10	4317	15
19	Tacuari	2747	33	2588	35	2668	36	2878	28	2926	25	2902	25	3137	15	3443	15	3290	15	1950	32
20	Centrifon	2420	41	2440	39	2430	41	2981	23	2474	37	2727	31	2750	21	2533	25	2641	23	5757	5
21	C-518	2267	44	3492	13	2880	29	2259	43	2526	36	2392	41	527	47	250	47	388	47	1540	35
22	Napo 63	3637	13	2944	28	3291	17	3118	19	3641	15	3379	16	4537	2	4487	4	4512	3	6043	3
23	Lerma Rojo 64A	4747	3	3392	18	4070	4	3315	15	2900	26	3107	19	2760	20	4350	8	3555	12	2800	28
24	C-306	2880	30	3232	19	3056	24	2381	42	2863	28	2622	35	727	46	337	46	532	46	2267	30
25	Tobari 66	4037	8	3712	6	3875	6	2630	11	3696	14	3163	18	4877	1	4693	3	4785	2	4823	13
26	VZ 133 Mara 3 x Fn-K58-N	4363	5	3464	15	3914	5	2944	25	3044	22	2994	21	1283	37	1640	35	1461	38	3590	21
27	Buck Manantiales	3103	26	2388	40	2746	33	841	47	696	47	768	47	387	49	207	48	297	48	977	43
28	C-591	2217	46	2828	30	2523	40	2937	27	2055	41	2495	38	400	48	133	49	266	49	1743	33
29	Giza 139	2363	42	2832	29	2598	38	2418	40	3211	18	2814	29	2007	32	980	41	1493	37	2993	26
30	Kl Pet x Rafaela	2750	32	3040	25	2895	28	2992	22	2992	23	2992	22	2060	31	2707	24	2383	25	3627	20
31	Son 64 x Sk <sub>E</sub> -LR 64A	3310	17	3212	20	3261	19	3267	16	4796	1	4031	8	1017	40	1690	39	1353	40	350	49
32	Sonora 64	2803	31	1620	49	2212	45	4067	5	4137	8	4102	7	1773	35	2843	23	2303	28	773	47
33	Super X	4890	2	3668	7	4279	2	4167	3	4730	2	4448	2	1260	38	2150	29	1705	34	1107	40
34	Bonza 63	3693	11	2972	27	3325	16	2944	26	2185	39	2564	37	3377	12	3150	18	3263	16	5233	9
35	Penjamo 62	4123	6	3192	21	3657	9	3937	7	4304	6	4120	6	2690	23	3943	13	3316	14	5833	4
36	CIANO F 67	2527	38	2308	44	2418	42	3622	12	4048	11	3835	10	3877	7	4260	9	4063	8	4890	11
37	Jaral 66	3327	16	2604	34	2965	26	2730	32	2981	24	2855	26	3310	13	3767	14	3538	13	1567	34
38	Lerma Rojo 64 x Sonora 64	3143	24	2084	45	2614	37	4030	6	3630	16	3830	11	4290	4	5343	1	4816	1	5350	7
39	Bonza 55	3243	22	3520	12	3382	15	2752	31	2433	38	2592	36	3073	16	2890	21	2981	19	3787	19
40	C-271	2953	28	3524	11	3239	20	2859	30	1970	43	2414	40	907	42	733	44	820	44	3560	22
41	Crespo 63	3170	23	4140	3	3655	10	3326	14	2574	34	2950	23	4100	5	4240	10	4170	5	6217	1
42	Crim	2547	37	3564	8	3505	12	1816	46	1518	45	1667	46	2177	29	2873	22	2525	24	190	50
43	Yaqui 50	3250	21	3872	4	3561	11	2970	24	2707	32	2838	28	3507	11	4427	6	3967	9	4293	16
44	NP 880	3263	20	2672	32	2968	25	2396	41	2085	40	2240	44	2960	18	3090	20	3025	18	4233	17
45	Son 64 x TzPP-Nai 60 (A)	3107	25	3424	16	3266	18	3748	10	4130	9	3939	9	960	41	2383	26	1671	35	2190	31
46	Son 64 x TzPP-Nai 60 (B)	3293	18	3132	22	3213	22	3581	13	4055	10	3819	12	3160	14	3967	12	3563	11	5250	8
47	INLA 66	4493	4	3072	24	3783	7	4637	1	3870	12	4253	3	3927	6	4227	11	4077	7	4883	12
48	Selkirk	2230	45	2348	43	2289	44	555	49	611	48	583	49	2327	27	3177	17	2752	22	1267	38
49	Gaboto	2627	35	2520	37	2574	39	2470	38	1748	44	2259	43	2210	28	983	40	1596	36	893	44
50	Klein Rendidor	1963	49	2360	41	2162	48	2130	45	1270	46	1700	45	23	50	3/	3/	3/	3/	5117 <sup>2/</sup>	10

1/ Rank

2/ See Table No. 3 for name of local variety

3/ No data available

TABLE 2. Preliminary Yield Information from the "4th International Spring Wheat Yield Nursery" for 1967-68 (continued)

Entry No.	Variety or cross	U S A														CANADA	
		Ft. Collins Col.		Aberdeen Idaho		Irrigated Av.		Davis Calif.		Ritzville Wash.		Pullman Wash.		Rainfed		Saskatoon	Rainfed
		kg/ha	1/	kg/ha	1/	kg/ha	1/	kg/ha	1/	kg/ha	1/	kg/ha	1/	kg/ha	1/	kg/ha	1/
1	Carazinho	4429	9	3077	32	3753	19	4837	38	1103	44	3078	30	3006	39	3800	9
2	Nariño 59	3855	22	3204	28	3529	24	4676	41	1265	39	3217	19	3053	38	3138	24
3	Son 64 x K1 Rend	4879	4	3462	19	4170	7	6532	13	1413	29	3171	23	3705	12	2761	30
4	Nainari 60	4794	6	4221	6	4507	2	5725	28	1467	22	3220	18	3471	27	5219	2
5	Justin	3090	34	2966	33	3028	38	3414	50	1554	13	2932	35	2633	47	3240	23
6	Gabo	4258	12	3125	30	3691	20	6263	18	1642	8	2826	44	3577	6	3670	13
7	Pitic 62	4996	3	5517	1	5256	1	7562	1	1413	30	3591	5	4189	1	5253	1
8	Siete Cerros	4218	13	4163	7	4190	6	7299	4	1453	24	3343	11	4032	5	3972	6
9	Noroeste 66	4412	10	2385	43	3398	29	6246	19	1325	35	2881	38	3484	26	2777	29
10	C-273	2812	40	2171	45	2491	49	3936	47	1420	28	3042	31	2799	44	2201	46
11	Giza 144	3349	31	3836	11	3592	22	4464	44	1319	37	2732	46	2838	43	3251	21
12	Thatcher	2775	41	3582	18	3178	33	3962	48	1426	26	2829	43	2719	45	3584	15
13	Norteño M 67	3351	30	1924	47	2637	48	6869	10	861	48	2803	45	3511	22	2874	27
14	Azteca F 67	3865	21	3836	12	3850	15	6384	16	1231	41	3430	6	3682	13	2616	34
15	Chris	2613	47	3395	23	3004	39	4373	45	794	49	2529	49	2565	48	3703	11
16	NP 852	2765	42	2791	37	2778	45	4827	39	1097	45	2693	47	2872	42	1491	49
17	Pakistan 5725	2842	38	3331	24	3086	35	6475	14	1372	34	2832	42	3560	20	2443	41
18	Huelquen	3562	24	4655	3	4108	8	6179	22	1520	16	3285	15	3661	15	4343	4
19	Tacuari	3028	35	3905	9	3466	27	5540	32	1393	32	3152	26	3362	31	3552	16
20	Centrifon	3344	32	3905	10	3624	21	6223	20	1137	43	2871	40	3410	30	2686	33
21	C-518	2424	48	3268	25	2846	44	5998	24	1467	23	3213	21	3559	21	2341	43
22	Napo 63	3115	33	3250	26	3182	32	5449	33	1487	18	3107	28	3348	32	2917	25
23	Lerma Rojo 64 A	2615	43	3100	31	2907	42	7293	6	1695	4	3210	22	4066	4	3245	22
24	C-306	2996	36	2922	35	2959	40	4884	37	1668	6	3349	10	3300	35	2083	47
25	Tobari 66	3900	19	3737	14	3818	16	6398	15	1810	1	3701	3	3970	8	3471	17
26	VZ 133 Mara 3 x Fn-K58-N	2618	46	4020	8	3319	30	5628	30	1473	20	3362	9	3488	25	3326	20
27	Buck Manantiales	3458	26	4701	2	4079	11	5826	27	1574	11	3853	1	3751	11	3956	7
28	C-591	2668	44	2673	39	2670	47	4518	42	1534	14	3191	25	3081	37	2449	40
29	Giza 139	3572	23	3608	17	3590	23	5359	35	1406	31	3255	16	3340	33	2578	36
30	K1 Pet x Rafaela	1908	50	2108	46	2008	50	4985	36	1144	42	2878	39	3002	40	2077	48
31	Son 64 x Sk <sub>E</sub> -LR 64A	4181	15	4258	4	4219	4	6956	9	1655	7	3378	7	3996	7	3671	12
32	Sonora 64	4096	16	2939	34	3517	25	7199	7	1487	19	3662	4	4116	3	2804	28
33	Super X	3947	18	4090	50	4018	13	7410	2	1675	5	3320	12	4135	2	4047	5
34	Bonza 63	3497	25	3448	21	3472	26	5695	29	1473	21	3314	13	3494	23	4349	3
35	Penjamo 62	5207	1	3222	27	4214	5	7299	5	1319	38	2945	34	3854	10	3778	10
36	CIANO F 67	5005	2	2516	42	3760	18	6196	21	976	47	3223	17	3465	28	2400	42
37	Jaral 66	4844	5	2743	38	3793	17	6627	11	1023	46	3365	8	3672	14	2508	38
38	Lerma Rojo 64 x Sonora 64	4064	17	1838	48	2951	41	6603	12	1325	36	2551	48	3493	24	2713	31
39	Bonza 55	4203	14	3691	15	3947	14	5365	34	1763	3	2858	41	3329	34	3859	8
40	C-271	3878	20	2611	40	3244	31	6364	17	1494	17	3107	29	3655	16	2524	37
41	Crespo 63	4501	8	3633	16	4067	9	6038	23	1581	10	3310	14	3643	17	3385	19
42	Crim	3391	29	2888	36	3139	34	4178	46	1527	15	3149	27	2951	41	3455	18
43	Yaqui 50	2936	37	3158	29	3047	36	5916	25	1426	27	3036	33	3459	29	2341	44
44	NP 880	2243	49	1822	49	4032	12	4481	43	666	50	2044	50	2397	49	721	50
45	Son 64 x TzPP-Nai 60 (A)	4630	7	4230	5	4430	3	5594	31	1446	26	3843	2	3628	18	2249	45
46	Son 64 x TzPP-Nai 60 (B)	4372	11	3739	13	4055	10	7064	8	1568	13	3042	32	3891	9	2696	32
47	INIA 66	3443	28	2295	44	2869	43	7373	3	1769	2	2890	37	4011	6	2481	39
48	Selkirk	2822	39	2609	41	2715	46	3724	49	1374	33	2910	36	2669	46	2906	26
49	Gaboto	3450	27	3411	22	3430	28	4760	40	1594	9	3201	24	3185	36	2610	35
50	Klein Rendidor	2628	45	3462	20	3045	37	5914 <sup>2/</sup>	26	1238	40	3217	20	3/	3/	3648 <sup>2/</sup>	14

1/ Rank

2/ See Table No. 3 for name of local variety

3/ No data available

TABLE 3. Origin, name, pedigree and yield of the 50th variety used in the "4th International Spring Wheat Yield Nursery," 1967-68.

Country	Location	Name of local variety used	Pedigree	Yield
Pakistan:	Tandojam	Nayah	(Pj62-Gb55-Gb-56)TzPP x Nai 60	4847
	Lyallpur	Charb	B x K-8 x 5839 376a-3a-3a	5203
	Tarnab	Abasin	[ (21931-Ch 53 x An) Y 50 ] C-271 7053-PK 937	2814
India:	Pusa	NPSSA		5468
	Pantnagar	3399-4-3	Yaktana 54 x N10-B21- [ (Magaliesberg x Mentana) Quaderna ] x Gabo	1243
Lebanon:	Housh Sneid	Najah		1317
	Tel Amara	Florence Aurore		4427
Syria:	Damascus	Florence Aurore		4400
Israel:	Beit Dagan	Florence Aurore		5013
Cyprus:	Athienou	Kyperounda		1510
Egypt:	Sakha	Giza 155		5170
	HF Bahtim	Giza 155		7373
	NF Bahtim	Giza 155		7433
Sudan:	Ed Damer	Hindi 62		3573
Libya:	Sedi Mesri	Florence Aurore		4420
S. Africa:	Stellenbosch	3399-4-3		1480
Morocco:	Rabat	2306 Pinyte		2322
Colombia:	Tibaitatá	16A ZIPA-68		5117
USA:	Davis, Calif.	Ramona 50		5802
Canada:	Saskatoon	Manitou		3648

TABLE 4. Performance of wheat in the "4th International Spring Wheat Yield Nursery" to stem rust (*Puccinia graminis tritici*) 1967-68 - Preliminary summary<sup>1/</sup>

Entry No.	Variety or cross	Origin	AMERICAS					ASIA		AFRICA	PORTUGAL		AFRICA			
			Mexico		Colombia	Jordan	Syria	Tunisia	Elvas <sup>1/</sup>		Libya	Egypt	S. Africa			
			CIANO <sup>1/</sup>	El Batan	Toluca	Tibaitatá	Deir Alla	Damascus	Ariana	1st.date	2nd.date	Sedi Mesri	Bahim	Stellenbosch		
1	Carazinho	Brazil	30MS	60S	80MS	5R	0	R	R	0	0	T5MR-R	R	TR	TR	50S
2	Nariño 59	Colombia	TR	TR	50MR	TR	0	0	MS	0	TR	TR	R	0	TR	40MS-S
3	Sonora 64 x Kl Rend	Argentina	5R	TR	30MR	TR	0	R	R	0	3R	0	R	TR	0	40MS-S
4	Nainari 60	Mexico	50MS	100S	80MS-S	20MR	5R	R	R	0	TR	TR	R	5MS	TR	80S
5	Justin	USA	20MR	20R	30MS	TR	0	0	R	0	0	TR	R	TS	0	15S
6	Gabo	Australia	80MS	100S	70MS	50MR	0	R	R	0	20-30S	TR	R	10S	5MS-S	80S
7	Pitic 62	Mexico	60MS	100S	90S	100S	0	R	MR	0	0	TR	R	5S	T-MS	10S
8	Siete Cerros	Mexico	50MS	100S	90S	60S	0	0	S	0	5MS	TR	R	10S	5MS	70S
9	Noroeste 66	Mexico	TR	0	20RMR	TR	0	0	R	0	TR	0	R	TR	0	60MS
10	C-273	Pakistan	10S	50S	50S	60S	0	MR	VS	10MS	10S	20-30S	MR	5S	T-MS	80S
11	Giza 144	Egypt	TR-5S	0	5MR	TR	0	0	S	0	0	TR	R	5S	T-MS	80S
12	Thatcher	USA	5-20MS	TR	50MS	15MR	0	0	MR	0	0, TR	TMS-S	R	40S	30S	50S
13	Norteno M67	Mexico	TR	0	10R	TR	0	0	MR	0	0	TR	R	0	0	40MS
14	Azteca F67	Mexico	5R	30MR	5R	TR	0	0	MS	0	3R	T-5MR-R	R	TS	T-MS	0
15	Chris	USA	TMR	5R	20MS-S	TR	0	0	R	0	0	T-5MS-S	MR	TR	0	0
16	NP 852	India	50MS	60S	70MS	100S	0	R	MS	0	0, N	5-10R	MR	5S	10MS	100S
17	Pakistan 5725	Pakistan	70MS	100S	70MS	200S	0	0	VS	40S	20S	30S	S	5S	10S	80-100S
18	Huelquen	Argentina	10MS	20R	20MR-TS	5MR	0	0	MR	0	0	TR	R	0	0	TS
19	Tacuari	Argentina	TMR	TR	40R	TR	0-5R	0	R	T	0	T-5MR-R	R	TMR	5R	40MS
20	Centrifon	Chile	5R	10MR	80S	70S	0	0	R	0	0	TR	MR	0	0	30S
21	C-518	India	50MS	80S	80S	100S	15MR	0	MS	90S	20S	40-50S	S	15S	5S	40S
22	Napo 63	Colombia	TR	0	5R	TR	0	0	VS	T	0	T5R	R	0	TR	5-10S
23	Lerma Rojo 64A	Mexico	80S	80S	20MS	70S	0	R	R	0	0	TR	R	0	0	60MS
24	C-306	India	50MS	30MR	80MS-S	50S	0	0	VS	10MS	10S	30-S	MS	20S	T-MR	60S
25	Tobari 66	Mexico	TR	0	10R	TR	0	0	R	0	0	TR	R	0	0	0
26	VZ 133 Mara 3x Fn-K58-N	Italy	80S	30S	100S	100S	0	0	MR	10M	5S	5-10MS-S	MR	5S	TMS	40S
27	Buck Manantiales	Argentina	40MR	100S	80S	100S	0	R	R	5M	TR	TR	R	25S	5MS	10S
28	C-591	India	40MS-S	100S	80S	80S	0	0	S	10MS	30S	30-40S	R	20S	5MS	50S
29	Giza 139	Egypt	5MR	100S	80MS	80S	20MR-MS	0	S	0	0, 5S	TR	R	5MS	5MS	70S
30	Kl Pet x Rafaela	Argentina	20M	80S	80MS	90S	0	0	MR	0	0	T-5R	R	TR	TR	0
31	Son 64 x Sk. -LR64A	Argentina	50MR	30S	80MS-S	100S	0	R	R	0	0	TR	R	TMS	5MS	10S
32	Sonora 64 E	Mexico	10MR	0	80MS-S	80S	0	0	R	0	0e	0	R	5S	5MS	TS
33	Super X	Mexico	60MS	40S	80S	80S	0	0	S	0	0	T-5R	R	10S	5MS	80-100 <sup>2</sup>
34	Bonza 63	Colombia	TR	20MR	TR	TR	0	0	MS	0	TR	TR	R	TR	0	5S
35	Penjamo 62	Mexico	50-30S	40S	90S	80S	0	0	MR	0	TR, TS	TR	R	5S	5MR	TS
36	CIANO F67	Mexico	10MR	0	20MR	TR	0	0	MS	0	0e	TR	R	5S	0	0
37	Jaral 66	Mexico	TR	0	40R-MR	TR	0	0	R	0	0	TR	MR	0	0	0
38	Lerma Rojo 64 x Sonora 64	Mexico	TR	0	5R	TR	0	0	R	0	0	TR	R	0	0	10MS-S
39	Bonza 55	Colombia	TR	0	TR	TR	0	0	MS	5MR	TR	5-10MR-MS	R	5S	0	60S
40	C-271	Pakistan	80S	100S	100S	100S	30MS-S	R	VS	20MS	70VS	40-50S	S	50S	10MS	50S
41	Crespo 63	Colombia	5R	20R	30MS	TR	0	0	MR	T	0	TR	R	T-MS	0	5MR
42	Crim	USA	5R	0	TR	TR	0	0	MS	20R	0	0	MR	T-MR	0	20S
43	Yaqui 50	Mexico	5R	0	TR	5R	0	0	S	5MR	0, 5S	5-10MS-S	R	5MS	0	20S
44	NP 880	India	30S	40S	80MS	30R	0	0	S	5R	TS	5-10MR-MS	R	5S	0	40S
45	Son 64 x TzPP-Nai 60 (A)	Argentina	80MS	60S	90S	90S	0	0	R	0	0	TR	R	TS	0	15S
46	Son 64 x TzPP-Nai 60 (B)	Argentina	TS	TR	40MR	TR	0	0	R	0	0	TR	R	0	TR	0
47	INIA 66	Mexico	30MR	40S	5R	TR	0	0	R	10R	0	TR	R	0	0	10S
48	Selkirk	Canada	TR	30S	30MR	TR	0	R	S	0	0	TR	R	TS	T-MS	60S
49	Gaboto	Argentina	30MS	60S	30MR-R	TR	0-TR	0	R	5R	0	T-5R	R	T-MS	0	40S
50	Klein Rendidor	Argentina	50R-MR	60S	40MS	TR	3/	R	MR	0	0	30-40S	MS	3/	3/	5S

1/ See introductory text for description of reaction to rust and average coefficient of infection

3/ Local variety substituted

2/ Two levels of Fertilization NF=Normal 40 Kg N, 30 Kg P<sub>2</sub>O<sub>5</sub>

HF=High 80 Kg N, 50 Kg P<sub>2</sub>O<sub>5</sub>

TABLE 4. Performance of wheat in the "4th International Spring Wheat Yield Nursery" to stem rust (*Puccinia graminis tritici*) 1967-68 - Preliminary summary<sup>1/</sup>(continue

Entry No.	Variety or cross	Origin	ASIA										Summary	
			Iran	Turkey		Afghanistan	India		Nepal	West Pakistan			Highest Reading	Av. Coef. of Infection
			Ahwaz	Adapa-zari	Eski-sehir	Darul Amon	New Delhi	Powark-heda	Kathmandu	Khan-pur	Lyallpur	Tandojam		
1	Carazinho	Brazil	0	0	10	0	T-MS	40MR	10R	0	0	10MR	50S	10.6
2	Nariño 59	Colombia	10MR	0	0	0	T-MS	30R	5R	0	0	0	40MS-S	3.0
3	Sonora 64 x Kl Rend	Argentina	0	0	0	0	T-MS	40R	10R	0	0	0	40MS-S	2.6
4	Nainari 60	Mexico	0	0	0	0	10MS	30R	5R	0	0	0	100S	14.8
5	Justin	USA	0	0	0	0	0	20R	5R	0	0	0	30MS	2.5
6	Gabo	Australia	5R	0	0	0	100S	10R	10R	0	0	0	100S	21.9
7	Pitic 62	Mexico	10S	0	10	0	0	T	25S	0	0	0	100S	19.4
8	Siete Cerros	Mexico	30S	0	40	0	0	30MR	25S	5MS	40S	0	100S	23.2
9	Noroeste 66	Mexico	0	0	0	0	T-MS	10R	10R	0	0	5MR	60MS	2.7
10	C-273	Pakistan	50S	0	40	30S	100S	40R20MS	45S	50S	25MS	0	100S	35.6
11	Giza 144	Egypt	5MR	0	0	0	T-MS	30S	10R	5MS	0	0	80S	6.7
12	Thatcher	USA	20S	0	10	0	T-MS	40MR	45S	100S	25MS	0	100S	17.9
13	Norteno M67	Mexico	0	0	0	0	0	10R	25MR	0	0	5MS	40MS	2.2
14	Azteca F67	Mexico	0	5MR	0	0	0	T	5R	0	0	0	30MR	0.8
15	Chris	USA	0	0	0	0	0	10MR-20MS	25R	0	0	0	25MS-S	1.6
16	NP 852	India	5MR	10MS	40	0	TS	40R, 10S	25S	0	0	0	100S	20.7
17	Pakistan 5725	Pakistan	40S	10MS	40	75S	100S	80S	60S	60S	65S	0	100S	47.3
18	Huelquen	Argentina	5MR	15S	0	0	0	T	10R	0	0	0	15S	1.8
19	Tacuari	Argentina	0	0	0	0	0	20R	0	0	0	0	40MS	2.1
20	Centrifen	Chile	10S	10MS	0	0	0	5R	10S	0	0	0	80S	9.7
21	C-518	India	30S	20S	30	50S	100S	50MS	25S	50S	25MS	0	100S	42.8
22	Napo 63	Colombia	60S	30S	0	0	0	T	45S	0	25MS	0	60S	7.4
23	Lerma Rojo 64A	Mexico	0	5MR	0	0	0	T	25R	0	0	0	80S	14.3
24	C-306	India	50S	0	0	25S	100S	60M	25S	40S	40S	0	100S	28.0
25	Tobari 66	Mexico	0	5MR	0	0	0	T	25R	0	0	0	25R	0.4
26	VZ 133 Mara 3 x Fn-K58-N	Italy	10S	5MR	10	0	0	10R	10S	0	10MR	0	100S	19.0
27	Buck Manantiales	Argentina	0	0	10	0	0	10R	0	0	0	0	100S	17.0
28	C-591	India	10S	10MS	60	50S	100S	60M	45S	20S	25MS	0	100S	34.8
29	Giza 139	Egypt	30S	0	0	0	0	70M	25S	5MS	25MS	0	100S	21.0
30	Kl Pet x Rafaela	Argentina	0	0	40	0	0	T	0	0	5R	0	90S	11.8
31	Son 64 x Sk <sub>E</sub> -LR64A	Argentina	0	0	0	0	0	35MR	0	0	0	0	100S	11.9
32	Sonora 64	Mexico	0	0	0	0	0	65M	45S	0	0	0	80S	11.3
33	Súper X	Mexico	0	0	10	0	0	45MR	0	0	0	0	80-100S	17.6
34	Bonza 63	Colombia	60S	0	0	0	0	T	0	0	0	0	60S	3.3
35	Penjamo 62	Mexico	10MS	0	0	0	0	35M	0	0	0	0	90S	12.5
36	CIANO F67	Mexico	0	10MS	10	0	0	T	10MR	0	0	0	10MS	1.3
37	Jaral 66	Mexico	0	0	0	0	0	T	5R	0	0	0	40MR	0.6
38	Lerma Rojo 64 x Sonora 64	Mexico	0	0	10	0	0	15MR	0	0	0	0	10MSS	0.7
39	Bonza 55	Colombia	10S	0	0	0	0	10R, 15MS	0	0	0	0	60S	4.1
40	C-271	Pakistan	70S	0	60	50S	100S	40MR	45S	60S	40S	0	100S	51.3
41	Crespo 63	Colombia	0	0	0	0	0	T	25S	0	0	0	30MSS	2.5
42	Crim	USA	5MR	0	10	0	0	T	0	0	0	0	20S	1.3
43	Yaqui 50	Mexico	0	0	0	25S	TS	20R, 5MS	25S	0	0	0	25S	4.1
44	NP 880	India	20S	0	20	50S	0	40M	45S	0	40S	0	80MS	17.5
45	Son 64 x TzPP-Nai 60 (A)	Argentina	0	10MS	0	0	0	T	10MR	0	0	0	90S	15.0
46	Son 64 x TzPP-Nai 60 (B)	Argentina	0	0	0	0	0	20R	0	0	0	0	40MRT	0.7
47	INIA 66	Mexico	20R	10MS	10	0	0	T	10R	0	0	0	40S	3.7
48	Selkirk	Canada	0	5MR	0	0	0	25M	10S	20MS	4	0	60S	7.2
49	Gaboto	Argentina	0	5MR	10	0	0	40R	10MS	0	0	0	60S	7.3
50	Klein Rendidor	Argentina	0	0	10	25S	40S	50M	60S	20S	4	0	60S	20.1

<sup>1/</sup> See introductory text for description of reaction to rust and acreage coefficient of infection

TABLE 5. Performance of wheat in the "4th International Spring Wheat Yield Nursery" to leaf rust (*Puccinia recondita*) 1967-68 - Preliminary summary<sup>1/</sup>

Entry No.	Variety or cross	Origin	A M E R I C A S				A F R I C A					A S I A	
			Canada	Mexico		USA	Libya	Egypt		South Africa	Tunisia	Jordan	
			Saskatoon	CIANO		Colorado	Sedi Mesri	Bahim	Sakha	Stellenbosch	Ariana	Deir Alla	
			1st. date	2nd. date	Ft. Collins		NF	HF					
1	Carazinho	Brazil	1R	5MS	10R	0	MS	0	0	0	0	10MR	0
2	Nariño 59	Colombia	20M	0	TR	TMS	MR	15S	15MS-S	60S	2S	0	MR
3	Sonora 64 x K1 Rend	Argentina	TR	30MS	40S	TR	R	0	0	0;	0	0	0
4	Nainari 60	Mexico	30M	50MS	10MR	10R, 5S	MR	15MS	10MS	20S	2S	10MR	R
5	Justin	USA	5M	10MR	20MR	5S	R	15MS	10MS	10MS	2S	5MR	MR
6	Gabo	Australia	60S	100S	40S	50S	R	15MS	50MS-S	5MS	60S	0	R
7	Pitic 62	Mexico	20MR	100S	60S	20S	MR	50MS-S	50MS-S	20S	10S	T	R
8	Siete Cerros	Mexico	1R	80S	40S	10S	MS	60S	80MS-S	50S	20S	0	R
9	Noroeste 66	Mexico	TR	0	TR	0	R	0	0	0;	T	0	0
10	C-273	Pakistan	50M	TR	20MR	15S	S	10MS-S	15MS-S	30S	0	30M	MR
11	Giza 144	Egypt	20MR	100S	40MR	20S	MR	40MS-S	60S	60S	0	0	MR
12	Thatcher	USA	90S	80MS	40S	20S	S	30MS-S	30S	80S	100S	40M	S
13	Nortefo M67	Mexico	TR	20MR-MS	TR	0	R	0	0	0;	0	0	0
14	Azteca F67	Mexico	TR	20MR	20MR	0	R	0	0	0;	0	0	0
15	Chris	USA	TR	5R	TR	0	R	0	0	0;	0	0	0
16	NP 852	India	40M	100S	60S	50S	S	25MS	20MS-S	100S	10S	0	MR
17	Pakistan 5725	Pakistan	30M	100S	60S	15S	S	5MS	5MS	20R	20S	50MS	MR
18	Huelquen	Argentina	2R	80S	20MR	0	MR	0	0	0;	0	0	0
19	Tacuari	Argentina	TR	TR	TR	0	R	0	0	0;	T	0	R
20	Centrifon	Chile	5M	50MS	20R	0	MS	15MS	20MS	30S	15S	0	R
21	C-518	India	15M	80MS	40S	20S	S	5MS	5MS	40S	5S	30M	R
22	Napo 63	Colombia	30M	80S	40MR	10S	MR	30MS-S	30MS-S	70S	40S	T	0
23	Lerma Rojo 64A	Mexico	2M	50S	40S	5R	R	TMR	TMR	0;	2S	T	0
24	C-306	India	30M	30MS	10R	20S	MS	20MS	15MS-S	60S	15S	0	R
25	Tobari 66	Mexico	TR	TR	TR	0	R	0	0	0;	0	T	0
26	VZ 133 Mara 3 x Fn-K58-N	Italy	1R	50MS	10R	5S	S	5MS	5MS	5MS	60S	20MR	MR
27	Buck Manantiales	Argentina	1R	10MS	40S	0	R	5MS	5MS	TMR	0	0	R
28	C-591	India	1R	20MS	40MR	10S	S	15MS-S	10MS-S	40S	10S	20MR	R
29	Giza 139	Egypt	40MS	100S	0	10S	MS	50S	50S	80S	15MS-S	20MR	MR
30	K1 Pet x Rafaela	Argentina	TR	TR	10MR	TMS	R	5MS	5MR	5MR	0	T	0
31	Son 64 x Sk <sub>E</sub> -LR64A	Argentina	3R	100S	60S	0	R	5MR	TR	0;	T	0	R
32	Sonora 64	Mexico	30M	100S	60S	5S	R	TR	TR	0;	50S	0	0
33	Super X	Mexico	20M	50S	20MR	10S	R	30MS	20MS	80S	5S	0	R
34	Bonza 63	Colombia	30MS	40S	10R	5S	R	30MS-S	30MS-S	80S	T	20MR	R
35	Penjamo 62	Mexico	TR	50MR	20MR	10S	MR	10MS	10MS	10S	0	T	R
36	CIANO F67	Mexico	TR	40MS	0	0	R	0	0	0;	0	0	0
37	Jaral 66	Mexico	TR	TR	5R	0	R	0	0	0;	0	T	0
38	Lerma Rojo 64 x Sonora 64	Mexico	TR	5MS	TR	0	R	0	0	0;	T	0	0
39	Bonza 55	Colombia	30MR	10M	20MR	20S	MR	20MS	15MS	80S	5MS-S	T	R
40	C-271	Pakistan	60S	100S	20S	50S	S	10MS	15MS	100S	30S	5R	MR
41	Crespo 63	Colombia	10MR	50MS	20MR	20MR	R	5MR	TMR	10MS	2S	T	R
42	Crim	USA	80S	80S	20MR	30S	MR	30MS-S	20MS	30S	40S	0	R
43	Yaqui 50	Mexico	40M	50S	30MR	10S	R	15MS-S	10MS	60S	0	0	MR
44	NP 880	India	50MS	10MS	10MR	60S	S	40MS	20MS-S	100S	20S	10MR	MR
45	Son 64 x TzPP-Nai 60 (A)	Argentina	20M	80S	20R	5R	R	0	0	5MR	0	0	0
46	Son 64 x TzPP-Nai 60 (B)	Argentina	3R	40MS	TR	0	R	TMR	0	0;	0	0	R
47	INIA 66	Mexico	1R	50MS	20R	10S	R	0	TR	0;	T	T	R
48	Selkirk	Canada	70S	80MS	40MR	5S	R	50MS-S	50MS	40S	10MS	10MR	R
49	Gaboto	Argentina	TR	TR	10MR	0	R	0	0	0;	0	T	R
50	Klein Rendidor	Argentina	3/	40MR	20MR	0	3/	3/	3/	3/	30S	0	R

1/ See introductory text for description of reaction to rust and average coefficient of infection

3/ Local variety substituted

2/ Two levels of Fertilization NF= Normal 40 Kg N, 30 Kg P<sub>2</sub>O<sub>5</sub>  
HF= High 80 Kg N, 30 Kg P<sub>2</sub>O<sub>5</sub>

TABLE 5. Performance of wheat in the "4th International Spring Wheat Yield Nursery" to leaf rust (*Puccinia recondita*) 1967-68 - Preliminary summary<sup>1/</sup> (Continued)

Entry No.	Variety or cross	Origin	ASIA									Summary	
			Lebanon Tel Amara	Syria Damascus	Turkey Adapazari Eskisehir		India New Delhi Pantnagar		Nepal Kathmandu	West Pakistan Lyallpur Tandojam		Highest Reading	Average Coef of Infection
1	Carazinho	Brazil	20S	S	60S	10	40M	R	10MR	0R	0	60S	5.9
2	Nariño 59	Colombia	30MS	R	80VS	0	100MS	S	25S	10MR	60MS	80VS	18.1
3	Sonora 64 x Kl Rend	Argentina	0	VS	70S	0	65MR	R	0	0R	5MR	70S	7.3
4	Nainari 60	Mexico	0	VS	40S	10	65MR	S	10MS	0R	TR	40S	9.8
5	Justin	USA	15S	MR	40S	10	65S	S	0	25MR	40MR	65S	10.2
6	Gabo	Australia	0	VS	90VS	10	TMR	MS	0	0R	10MS	100S	23.4
7	Pitic 62	Mexico	70S	S	25S	10	100S	MS	40S	0R	TR	100S	28.5
8	Siete Cerros	Mexico	70VS	S	90VS	40	100S	S	25S	25MS	60MR	100S	33.0
9	Noroeste 66	Mexico	0	R	90VS	0	100S	HR	0	0R	0	100S	10.0
10	C-273	Pakistan	50S	MR	90VS	40	100S	S	10MS	40S	60VS	100S	26.8
11	Giza 144	Egypt	20S	S	80VS	10	100S	S	25S	5R	25MR	100S	26.9
12	Thatcher	USA	40S	R	95VS	30	100S	HS	45S	100VS	60MS	100VS	43.3
13	Norteño M67	Mexico	0	VS	70S	10	100S	HR	0	0R	0	100S	9.1
14	Azteca F67	Mexico	10S	R	25S	10	0	R	0	0R	TR	25S	2.4
15	Chris	USA	0	MS	15S	10	0	MR	0	0R	0R	15S	0.8
16	NP 852	India	30S	R	25S	40	40MS	S	25S	0R	10MS	100S	26.4
17	Pakistan 5725	Pakistan	50VS	R	90VS	60	100S	S	25S	25MR	100VS	100VS	35.0
18	Huelquen	Argentina	TR	R	25S	0	0	HR	0	0R	0R	80S	5.1
19	Tacuari	Argentina	0	R	25S	0	0	HR	10R	0R	0R	25S	1.3
20	Centrifon	Chile	5R	R	60S	0	25MR	MR	0	25MR	25MS	60S	10.7
21	C-518	India	100VS	R	80VS	30	100S	S	25S	40S	60VS	100S	30.7
22	Napo 63	Colombia	80MS	R	90VS	30	100S	HS	45S	65VS	40MS	100S	34.2
23	Lerma Rojo 64A	Mexico	TMR	VS	80VS	30	65MR	HR	0	0R	0R	80VS	10.0
24	C-306	India	80VS	R	70S	10	100S	S	10MS	25MS	60VS	100S	27.9
25	Tobari 66	Mexico	0	R	40S	0	0	HR	0	0R	0R	40S	1.8
26	VZ 133 Mara 3 x Fn-K58-N	Italy	90VS	R	80VS	10	100S	S	10S	25MS	60MS	100S	24.5
27	Buck Manantiales	Argentina	10MR	MR	50S	10	25MR	S	10R	0R	5R	50S	6.4
28	C-591	India	80VS	R	60S	20	100S	S	0	25MS	60VS	100S	22.2
29	Giza 139	Egypt	70VS	R	90VS	10	100S	MS	25S	40S	60MS	100S	37.5
30	Kl Pet x Rafaela	Argentina	15MS	R	25S	20	65MS	R	0	10MR	TR	65MS	5.6
31	Son 64 x SkP-LR64A	Argentina	5R	VS	25S	10	65S	R	0	0R	TR	100S	13.3
32	Sonora 64	Mexico	TR	R	60S	0	65S	MS	25S	0R	TR	100S	18.2
33	Super X	Mexico	20MR	R	40S	10	TR	MR	0	0R	TR	80S	12.6
34	Bonza 63	Colombia	40S	R	70S	0	25S	R	25R	0R	25MR	80S	17.4
35	Penjamo 62	Mexico	10MS	S	90VS	0	0	R	0	0R	25MR	90VS	8.2
36	CIANO F67	Mexico	TR	R	80VS	10	0	S	0	0R	TR	80VS	5.3
37	Jaral 66	Mexico	0	R	50S	10	0	HR	0	0R	TR	50S	2.4
38	Lerma Rojo 64 x Sonora 64	Mexico	0	S	60S	0	25S	R	0	0R	0R	60S	4.0
39	Bonza 55	Colombia	30MR	R	25S	0	40S	S	0	0R	60MS	80S	15.2
40	C-271	Pakistan	60VS	R	90VS	50	100S	MR	45S	65VS	40VS	100S	39.0
41	Crespo 63	Colombia	20MS	R	60S	10	0	S	45S	0R	TR	60S	9.6
42	Crim	USA	20S	VS	15S	10	0	HR	10R	0R	0R	80S	17.4
43	Yaqui 50	Mexico	20S	R	25S	10	100MS	S	10R	0R	TR	100MS	15.2
44	NP 880	India	50S	R	90VS	20	100S	R	25S	40S	60VS	100S	32.8
45	Son 64 x TzPP-Nai 60 (A)	Argentina	0	S	90VS	0	0	R	5R	0R	0R	90VS	9.0
46	Son 64 x TzPP-Nai 60 (B)	Argentina	0	R	70S	0	0	R	0	0R	0R	70S	4.8
47	INIA 66	Mexico	0	R	90VS	10	65MS	MR	25R	0R	10R	90VS	10.1
48	Selkirk	Canada	40S	R	75S	0	65MS	S	25R	10MR	TR	75S	25.1
49	Gaboto	Argentina	0	R	25S	10	0	HR	0	0R	0R	25S	1.4
50	Klein Rendidor	Argentina	30S	2/	15S	10	0	R	45S	5R	2/	45S	9.6

<sup>1/</sup> See text for description of reaction to rust and average coefficient of infection

<sup>2/</sup> Local variety substituted



TABLE 6. Performance of wheat in the "4th International Spring Wheat Yield Nursery" to stripe rust (*Puccinia striiformis*) 1967-68 - Preliminary summary<sup>1/</sup>

Entry No.	Variety or cross	Origin	AMERICAS				ASIA				AFRICA	PORTUGAL		AFRICA			
			Mexico		Colombia		Israel	Jordan	Lebanon	Syria	Tunisia	Elvas		Egypt			
			El Batan	Toluca	Tibaitatá		Beit Dagan	Deir Alla	Tel Amara	Damascus	Ariana	1st.date	2nd.date	NF	HF <sup>2/</sup>	Sakha	
					On leaves	On heads											
1	Carazinho	Brazil	TS <sup>3/</sup>	50S	40MS-MR	60S	2MS	0	50S	R	5MR	5S	10-20MS-S	0	0	0	
2	Nariño 59	Colombia	20MR	0	0-TR	0	0	0	0	R	0	0	5-10MR-R	0	0	0	
3	Sonora 64 x Kl Rend	Argentina	40S	30MR	60MS-S	100S	0	0	70S	R	0	0	0	0	0	0	
4	Nainari 60	Mexico	30S	50S	20MR	60S	30S	0	100S	S	T	5S	10-20S	10MS	5MS	40S	
5	Justin	USA	20MS-S	TR	5MR	TR	0	0	30MS	R	T	0	0	0	0	10S	
6	Gabo	Australia	80S	100S	90S	100S	100VS	0	100S	VS	0	90VS	50-60S	60MS-S	60MS-S	90S	
7	Pitiç 62	Mexico	60MR-MS	0	80S	90S	0	0	20MS	R	5MR	0	5MR-R	0	0	0	
8	Siete Cerros	Mexico	20S	40MR	60MS	90S	0	M	50S	S	0	0	5MR-R	0	0	30S	
9	Noroeste 66	Mexico	40S	80S	80S	40S	0	0	50S	S	0	0	TR	20MS	20MS-S	50S	
10	C-273	Pakistan	80S	TR	0-T-R	0	0	0	0	R	5MR	0	TR	0	0	0	
11	Giza 144	Egypt	80S-MS	40S	30MR	70MS	30VS	0	100S	S	T	80VS	80S	10MS	10MS	80S	
12	Thatcher	USA	80S	40MR	100S	30MS	5S	0	70S	MS	10MR	0	0	5MS	5MS	30S	
13	Norteño M67	Mexico	30MR-R	10R	5R	0	0	R	50S	R	0	0	0	0	0	5MR	
14	Azteca F67	Mexico	0	TR	20MR	50MS	0	MR	10MR	MR	0	0	TMR	0	0	20MS	
15	Chris	USA	50R	TR	5MR-R	10MS	30VS	0	40S	MS	0	0	0	0	0	20S	
16	NP 852	India	100S	100S	90-S	100S	80VS	0	80S	S	T	40S	80S	0	0	20S	
17	Pakistan 5725	Pakistan	100S	TR	5-R	15MS	0	R	10MR	R	50MS	0	5-10MS-S	0	0	0	
18	Huelquen	Argentina	20MS-MR	10R	10R-MR	0	20X	R	5R	R	5MR	T-15S	TR	0	0	0	
19	Tacuari	Argentina	TRMR	0	20MS	50MS	0	0	0	R	5MR	0	0	0	0	0	
20	Centrifon	Chile	100S	0	TR	TR	0	R	0	R	T	0	TR	0	0	0	
21	C-518	India	100S	0	5MR-R	0	0	R	0	R	40MS	0	TMR-R	0	0	0	
22	Napo 63	Colombia	80S	0	TR	TR	0	MR	0	MR	T	0	TMR-R	20MS	20MS	0	
23	Lerma Rojo 64A	Mexico	30R	50MR	90S	80S	0	0	50S	R	5MR	0	TMR-R	TMR	TMR	5MS	
24	C-306	India	80S	TR	5R	0	0	0	30MS	R	T	0	TR	0	0	0	
25	Tobari 66	Mexico	0	TR	10MR	10MS	0	R	0	R	T	0	TMR-R	0	0	0	
26	VZ 133 Mara 3 x Fn-K58-N	Italy	20R	5R	10MR	TR	0	MR	0	R	30M	60-80S	30-40S	0	0	0	
27	Buck Manantiales	Argentina	100S	15R	60S-MS	60MS	5S	0	40S	MR	T	0	TR	10MS	10MS	20S	
28	C-591	India	100S	0	5MR	TR-MS	0	R	0	R	20M	0	TR	0	0	0	
29	Giza 139	Egypt	60S	0	0-TMR	0	0	0	15MR	R	20M	0	0	0	0	0	
30	Kl Pet x Rafaela	Argentina	100S	100S	30MR-MS	40MS	20X	R	10MR	R	20M	0	TR	0	0	20S	
31	Son 64 x Sk <sub>E</sub> -LR64A	Argentina	100S	100S	90S	100S	5X	R	30MS	S	0	10-30S	10-20S	20MS	20MS	50S	
32	Sonora 64	Mexico	100S	100S	90S	100S	0	0	30MS	VS	T	20-40S	20S	0	0	30S	
33	Super X	Mexico	60S-MS	50MR	50MS	100S	0	MR	15MS	MS	0	0	SMR-MS	0	0	20S	
34	Bonza 63	Colombia	40MS-MR	0	5R	5MR	0	0	0	R	5MR	0	TMR	0	0	30S	
35	Penjamo 62	Mexico	80S	60S	30MR-R	10MR	0	MR	30MS	R	0	0	5-10MS-S	0	0	0	
36	CIANO F67	Mexico	60SMS	TR	50MS-MR	60S	2X	R	5R	R	0	0	5MR-R	0	0	10MS	
37	Jaral 66	Mexico	40SMS	TR	TR	5MR	0	MR	10MR	R	0	0	TMR-R	0	0	0	
38	Lerma Rojo 64 x Sonora 64	Mexico	40SMS	40MR	30MR-MS	20MS	0	R	60S	S	5M	0	0	TMS	TMS	20S	
39	Bonza 55	Colombia	40MS	20R	10MR	TR	0	0	0	R	T	0	TMR-R	0	0	10S	
40	C-271	Pakistan	100S	TR	5MR	10MS	0	0	0	R	5MR	0	5-10MS-S	0	0	0	
41	Crespo 63	Colombia	20MS-MR	TR	5R	TR	0	MR	0	R	T	TR	TR	0	0	0	
42	Crim	USA	80S	80MR	90S	90	50MS	0	70S	MS	0	T-10S	5-10MS-S	5MS	TMS	10S	
43	Yaqui 50	Mexico	80S	40S	10R	40MS	0	0	10MR	R	0	0	TMR-R	0	0	10MS	
44	NP 880	India	100S	20MS	0-TR	5MR	0	R	10MR	R	5MR	0	TR	0	0	0	
45	Son64 x TzPP-Nai 60 (A)	Argentina	100S	100S	80MS	90S	20MS	R	80S	MS	0	5-10S	30S	0	15MS-S	40S	
46	Son64 x TzPP-Nai 60 (B)	Argentina	80S-MS	20R	15MR	20MS	10MS	R	40S	MR	T	T-5S	5MS-S	TMR	TMR	0	
47	INIA 66	Mexico	60SMS	60MR	70MS-S	10MS	30VS	R	40S	MR	T	0-TR	TMR-R	0	0	0	
48	Selkirk	Canada	60MSS	10R	20MS	10MS	40X	0	50S	R	5MR	0	0	10MS	10MS	30S	
49	Gaboto	Argentina	80S-MS-MR	0	60S	90S	5X	R	50S	R	0	0	0	0	0	TMR	
50	Klein Rendidor	Argentina	20MR	50S	70S	80S	3/	0	3/	3/	0	0	TR	3/	3/	3/	

1/ See introductory text for description of reaction to rust and average coefficient of infection

3/ Local variety substituted

2/ Two levels of Fertilization NF=Normal 40 Kg N, 30 Kg P<sub>2</sub>O<sub>5</sub>

HF=High 80 Kg N, 30 Kg P<sub>2</sub>O<sub>5</sub>

TABLE 6. Performance of wheat in the "4th International Spring Wheat Yield Nursery" to stripe rust (*Puccinia striiformis*) 1967-68 - Preliminary summary<sup>1/</sup> (Continued)

Entry No.	Variety or cross	Origin	ASIA										Summary	
			Cyprus Athienou	Iran Ahwaz	Turkey Adapazari Eskisehir		Afghanistan Darul Amon	India New Delhi Pantnagar		Nepal Kathmandu	West Pakistan Lyallpur Tarnab		Highest Reading	Average Coef. of Infection
1	Carazinho	Brazil	5MR	0	0	0	0	TS	MS	0	OR	10	60S	9.4
2	Nariño 59	Colombia	R	0	0	0	TRMS	0	MS	0	OR	5	20MR	0.5
3	Sonora 64 x Kl Rend	Argentina	R	0	15S	30	0	0	HR	0	OR	0	100S	14.5
4	Nainari 60	Mexico	20MS	10S	15S	60	TRMS	65S	S	0	25MR	25	100S	22.2
5	Justin	USA	R	0	0	40	0	0	MS	0	OR	0	30MS	2.7
6	Gabo	Australia	80VS	20S	0	70	70S	100S	HS	25S	65VS	65-90	100S	60.6
7	Pitic 62	Mexico	10S	0	0	20	TRMS	0	HR	0	10MR	10	90S	11.9
8	Siete Cerros	Mexico	10S	0	0	40	0	0	MS	0	OR	0	90S	13.2
9	Noroeste 66	Mexico	10MS	0	40S	0	0	0	HR	0	OR	0	80S	19.1
10	C-273	Pakistan	R	0	0	0	0	0	S	0	10MR	25-40	80S	4.3
11	Giza 144	Egypt	20S	10S	15S	50	60MS	0	S	0	40S	25-40	80S	33.2
12	Thatcher	USA	S-MS	10S	0	60	0	0	S	0	25MS	0	100S	17.4
13	Norteño M67	Mexico	R	0	0	40	0	0	HR	0	OR	0	50S	3.3
14	Azteca F67	Mexico	R	10S	0	0	0	0	R	0	OR	0	50MS	3.9
15	Chris	USA	10MS	0	0	60	0	0	HR	0	OR	5	40S	5.6
16	NP 852	India	R	0	30S	70	0	0	S	10S	OR	0	100S	34.7
17	Pakistan 5725	Pakistan	5-MS	0	0	60	0	0	S	0	10MR	5	100S	9.5
18	Huelquen	Argentina	R	0	0	10	0	0	HR	0	OR	0	20MS-MR	2.5
19	Tacuari	Argentina	R	0	0	0	0	0	HR	0	OR	0	50MS	2.7
20	Centrifén	Chile	R	0	0	0	0	0	R	0	OR	0	100S	5.0
21	C-518	India	R	0	0	10	40S	0	S	0	40S	25-65	100S	11.2
22	Napo 63	Colombia	R	0	0	0	20S	0	R	0	25MS	10	80S	8.0
23	Lerma Rojo 64A	Mexico	10S	0	0	0	0	0	HR	0	OR	0	90S	11.9
24	C-306	India	10S	0	0	20	0	0	MS	0	OR	10	80S	5.7
25	Tobari 66	Mexico	R	0	0	0	0	0	HR	0	OR	0	10MS	0.6
26	VZ 133 Mara 3 x Fn-K58-N	Italy	5MS	10S	0	0	0	0	S	0	OR	0	60-80S	6.9
27	Buck Manantiales	Argentina	60VS	0	0	20	0	0	R	0	25MS	0	100S	16.6
28	C-591	India	R	0	0	0	0	0	S	0	10MR	0	100S	5.9
29	Giza 139	Egypt	R	0	0	30	80S	0	S	0	40S	65-90	80S	10.4
30	Kl Pet x Rafaela	Argentina	R	0	0	50	40S	0	R	0	10MR	10-25	100S	18.2
31	Son 64 x Sk <sup>E</sup> -LR64A	Argentina	60VS	0	10MS	50	40S	65S	S	0	40S	10-65	100S	37.4
32	Sonora 64 <sup>E</sup>	Mexico	R	0	10MS	20	0	100S	MS	0	25MS	0	100S	31.1
33	Super X	Mexico	20S	0	0	20	0	0	R	0	OR	5	100S	14.1
34	Bonza 63	Colombia	R	0	0	0	0	0	R	0	OR	5	30S	2.9
35	Penjamo 62	Mexico	5MS	0	0	40	0	0	HR	0	OR	0	80S	9.3
36	CIANO F67	Mexico	R	0	0	10	0	0	R	0	OR	0	60S	7.8
37	Jaral 66	Mexico	R	0	0	20	0	0	R	0	OR	25	40SMS	2.3
38	Lerma Rojo 64 x Sonora 64	Mexico	5MS	0	0	20	0	0	HR	0	OR	0	60S	8.6
39	Bonza 55	Colombia	10MS	0	0	10	0	0	MR	0	OR	10	40MS	2.9
40	C-271	Pakistan	R	0	0	0	0	0	MS	0	OR	0	100S	5.6
41	Crespo 63	Colombia	R	0	0	0	0	0	HR	0	OR	0	20MSMR	0.6
42	Crim	USA	30S	30S	0	60	0-25S	0	S	0	10MR	40	90S	20.4
43	Yaqui 50	Mexico	R	0	0	10	0	0	HR	0	5R	0	80S	8.3
44	NP 880	India	R	0	0	0	0	0	S	10S	10MR	0	100S	6.9
45	Son 64 x TzPP-Nai 60 (A)	Argentina	40S	0	0	40	30S	65S	S	0	25MS	40	100S	34.7
46	Son 64 x TzPP-Nai 60 (B)	Argentina	5MS	0	0	10	0-25S	0	MS	0	OR	5	80SMS	8.4
47	INIA 66	Mexico	5MS	0	0	0	0	0	HR	0	OR	0	60SMS	10.1
48	Selkirk	Canada	90VS	0	0	60	40S	0	R	0	OR	25-65	90VS	16.1
49	Gaboto	Argentina	10MS	0	0	0	0	0	HR	0	OR	0	90S	12.5
50	Klein Rendidor	Argentina	20S	0	0	0	0	0	HR	0	OR	2/	80S	14.2

<sup>1/</sup> See introductory text for description of reaction to rust and average coefficient of infection

<sup>2/</sup> Local variety substituted

TABLE 7. Rank and average coefficients of infections to stem, stripe, and leaf rust for the 50 varieties grown in the "4th International Spring Wheat Yield Nursery" 1967-68<sup>1/</sup>

Rank	STEM RUST (Black Rust)	Av. Coef. of Infection	STRIPE RUST (Yellow Rust)	Av. Coef. of Infection	LEAF RUST (Brown Rust)	Av. Coef. of Infection
	Variety		Variety		Variety	
1	Tobari 66	0.4	Nariño 59	0.5	Chris	0.8
2	Jaral 66	0.6	Tobari 66	0.6	Tacuari	1.3
3	Lerma Rojo 64 x Sonora 64	0.7	Crespo 63	0.6	Gaboto	1.4
4	Son 64 x TzPP-Nai 60 (B)	0.7	Jaral 66	2.3	Tobari 66	1.8
5	Azteca F 67	0.8	Huelquen	2.5	Azteca F 67	2.4
6	CIANO F 67	1.3	Justin	2.7	Jaral 66	2.4
7	Crim	1.3	Tacuari	2.7	Lerma Rojo 64 x Sonora 64	4.0
8	Chris	1.6	Bonza 63	2.9	Son 64 x TzPP-Nai 60 (B)	4.8
9	Huelquen	1.8	Bonza 55	2.9	Huelquen	5.1
10	Tacuari	2.1	Norteño N 67	3.3	CIANO F 67	5.3
11	Norteño M 67	2.2	Azteca F 67	3.9	Kl Pet x Rafaela	5.6
12	Justin	2.5	C-273	4.3	Carazinho	5.9
13	Crespo 63	2.5	Centrifen	5.0	Buck Manantiales	6.4
14	Son 64 x Kl Rend	2.6	Chris	5.6	Son 64 x Kl Rend	7.3
15	Noroeste 66	2.7	C-271	5.6	Penjamo 62	8.2
16	Nariño 59	3.0	C-306	5.7	Son 64 x TzPP-Nai 60 (A)	9.0
17	Bonza 63	3.3	C-591	5.9	Norteño M 67	9.1
18	INIA 66	3.7	VZ 133 Mara 3 x Fn-K58-N	6.9	Crespo 63	9.6
19	Bonza 55	4.1	NP 880	6.9	Klein Rendidor	9.6
20	Yaqui 50	4.1	CIANO F 67	7.8	Nainari 60	9.8
21	Giza 144	6.7	Napo 63	8.0	Lerma Rojo 64A	10.0
22	Selkirk	7.2	Yaqui 50	8.3	Noroeste 66	10.0
23	Gaboto	7.3	Son 64 x TzPP-Nai 60 (B)	8.4	INIA 66	10.1
24	Napo 63	7.4	Lerma Rojo 64 x Sonora 64	8.6	Justin	10.2
25	Centrifen	9.7	Penjamo 62	9.3	Centrifen	10.7
26	Carazinho	10.6	Carazinho	9.4	Super X	12.6
27	Sonora 64	11.3	Pakistan 5725	9.5	Son 64 x Sk <sub>E</sub> -LR64A	13.3
28	Kl Pet x Rafaela	11.8	INIA 66	10.1	Bonza 55	15.2
29	Son 64 x Sk <sub>E</sub> -LR64A	11.9	Giza 139	10.4	Yaqui 50	15.2
30	Penjamo 62 <sub>E</sub>	12.5	C-518	11.2	Bonza 63	17.4
31	Lerma Rojo 64A	14.3	Lerma Rojo 64A	11.9	Crim	17.4
32	Nainari 60	14.8	Pitic 62	11.9	Nariño 59	18.1
33	Son 64 x TzPP-Nai 60 (A)	15.0	Gaboto	12.5	Sonora 64	18.2
34	Buck Manantiales	17.0	Siete Cerros	13.2	C-591	22.2
35	NP 880	17.5	Super X	14.1	Gabo	23.4
36	Super X	17.6	Klein Rendidor	14.2	VZ 133 Mara 3 x Fn-K58-N	24.5
37	Thatcher	17.9	Sonora 64 x Kl Rend	14.5	Selkirk	25.1
38	VZ 133 Mara 3 x Fn-K58-N	19.0	Selkirk	16.1	NP 852	26.4
39	Pitic 62	19.4	Buck Manantiales	16.6	C-273	26.8
40	Klein Rendidor	20.1	Thatcher	17.4	Giza 144	26.9
41	NP 852	20.7	Kl Pet x Rafaela	18.2	C-306	27.9
42	Giza 139	21.0	Noroeste 66	19.1	Pitic 62	28.5
43	Gabo	21.9	Crim	20.4	C-518	30.7
44	Siete Cerros	23.2	Nainari 60	22.2	NP 880	32.8
45	C-306	28.0	Sonora 64	31.1	Siete Cerros	33.0
46	C-591	34.8	Giza 144	33.2	Napo 63	34.2
47	C-273	35.6	NP 852	34.7	Pakistan 5725	35.0
48	C-518	42.8	Son 64 x TzPP-Nai 60 (A)	34.7	Giza 139	37.5
49	Pakistan 5725	47.3	Son 64 x Sk <sub>E</sub> -LR64A	37.4	C-271	39.0
50	C-271	51.3	Gabo	60.6	Thatcher	43.3

<sup>1/</sup> See introductory text for method used in determining the average coefficient of infection to the rusts.

TABLE 8. Miscellaneous Data. IV International Spring Wheat Yield Nursery, 1967-68 - Preliminary summary

Entry No.	Variety or cross	Origin	India		Morocco		Tunisia		U. S. A.		Washington		
			Pusa	Alternaria Blight <sup>1/</sup>	Wheat Streak Mosaic Virus	Per cent yellow leaves	Ariana	Septoria <sup>3/</sup>	Erisiphe graminis <sup>3/</sup>	Colorado		Bunt	Root Rot <sup>5/</sup>
										1st. <sup>2/</sup>	2nd. <sup>2/</sup>		
1	Carazinho	Brazil	R	0	0	20R	30MR	50	2	0	10		
2	Narifo 59	Colombia	LS	20	40	20R	50MR	0	3	0	20		
3	Sonora 64 x Kl Rend	Argentina	TS	100	0	10M	40MR	0	1	0	10		
4	Nainari 60	Mexico	LS	60	60	30MR	40MR	0	3	0	20		
5	Justin	USA	LS	30	0	0	30MR	0	3	0	20		
6	Gabo	Australia	TS	50	70	20MR	40MR	0	2	smut	10		
7	Pitic 62	Mexico	TR	80	80	10MR	40MR	0	2	0	5		
8	Siete Cerros	Mexico	LS	70	80	30R	40MR	0	1	0	5		
9	Noroeste 66	Mexico	LS	60	100	40MR	50MR	10	1	smut	30		
10	C-273	Pakistan	TS	30	70	5R	50MR	T	3	smut	30		
11	Giza 144	Egypt	TS	30	50	40MR	50M	0	2	0	40		
12	Thatcher	USA	LR	70	80	20R	20R	0	3	0	30		
13	Norteno M67	Mexico	LS	70	80	30M	50MR	10	1	0	10		
14	Azteca F67	Mexico	LS	60	70	30MR	70M	0	1	0	14		
15	Chris	USA	TS	10	30	30MR	50MR	0	3	0	40		
16	NP 852	India	TS	100	0	10M	50MR	30	2	smut	30		
17	Pakistan 5725	Pakistan	MS	100	0	30MR	70M	20	3	0	30		
18	Huelquen	Argentina	TS	80	80	20M	30MR	0	3	0	40		
19	Tacuari	Argentina	LS	20	40	20MR	30R	0	2	smut	30		
20	Centrifon	Chile	LS	20	60	20M	50M	20	3	0	30		
21	C-518	India	TS	30	70	20R	50M	10	3	smut	20		
22	Napo 63	Colombia	TS	30	60	20R	50M	10	3	0	30		
23	Lerma Rojo 64A	Mexico	TR	30	40	20MR	50MR	0	3	smut	30		
24	C-306	India	LS	40	60	20MR	40MR	0	2	0	30		
25	Tobari 66	Mexico	LS	60	60	20MR	30MR	0	2	0	20		
26	VZ 133 Mará 3 x Fn-K58-N	Italy	L-MS	60	60	30MR	40MR	0	3	0	0		
27	Buck Manantiales	Argentina	LS	70	70	20R	40MR	T	3	0	20		
28	C-591	India	LS	80	90	10R	70M	T	2	0	30		
29	Giza 139	Egypt	LS	60	80	30MR	70M	0	2	smut	20		
30	Kl Pet x Rafaela	Argentina	LS	100	0	20R	30MR	0	3	0	10		
31	Son 64 x Sk <sub>E</sub> -LR64A	Argentina	LS	80	90	20M	30MR	30	2	0	10		
32	Sonora 64	Mexico	TS	70	80	20R	60M	10	1	0	5		
33	Super X	Mexico	LS	70	70	20MR	30MR	0	2	0	20		
34	Bonza 63	Colombia	TR	40	50	20M	50M	0	2	smut	40		
35	Penjamo 62	Mexico	TS	60	80	20MR	40MR	0	3	0	30		
36	CIANO F67	Mexico	TS	100	0	20R	40MR	0	1	smut	40		
37	Jaral 66	Mexico	MS	70	70	30MR	50M	0	2	0	40		
38	Lerma Rojo 64 x Sonora 64	Mexico	TR	60	70	20R	60M	30	2	smut	40		
39	Bonza 55	Colombia	TR	30	50	20M	60M	0	2	0	40		
40	C-271	Pakistan	TS	60	80	10MR	70M	20	2	smut	20		
41	Crespo 63	Colombia	LS	40	50	20MR	60MR	0	3	smut	20		
42	Crim	USA	TR	70	80	10M	60M	0	1	smut	30		
43	Yaqui 50	Mexico	TS	60	80	5R	70M	0	3	smut	40		
44	NP 880	India	LS	50	80	5R	60M	0	1	0	30		
45	Son 64 x TzPP-Nai 60 (A)	Argentina	LS	40	60	20M	50M	40	1	smut	20		
46	Son 64 x TzPP-Nai 60 (B)	Argentina	LS	30	40	20M	60M	0	1	0	20		
47	INIA 66	Mexico	TS	30	80	20MR	50M	20	1	0	5		
48	Selkirk	Canada	TS	80	80	5R	40MR	0	2	0	40		
49	Gaboto	Argentina	TR	60	70	20MR	50MR	0	3	0	30		
50	Klein Rendidor	Argentina	MS	100	0	20MR	40MR	0	2	0	30		

1/ Alternaria Blight: T=trace; L=light; M=moderate; S=susceptible; R=resistant 4/ Scale used= 1=none; 2=trace; 3=moderate; 4=moderately severe; 5=severe

2/ Two dates of disease ratings

5/ Root Rot=*Fusarium* sp.

3/ See introductory text for description of reaction to rust and average coefficient of infection