INIA 66R

...a new

high-yielding wheat selection

C. O. QUALSET · J. D. PRATO · J. A. RUPERT
H. E. VOGT · W. H. ISOM · W. F. LEHMAN

COMPARISON OF GRAIN YIELDS FOR INIA 66R AND INIA 66 IN CALIFORNIA
VARIETY EVALUATION TRIALS

Year	Location	INIA 66R	INIA 66	Difference
		Pounds per acre		
1969	Meridian, Sutter Co.	5010	4720	290
	Isleton, Sacramento Co.	5510	5280	230
	Davis, Yolo Co. (December planting)	6090	6050	40
	Davis, Yolo Co. (March planting)	4510	4510	0
	Riverside, Riverside Co. (Irrigated)	5960	5790	170
	Riverside, Riverside Co. (Dryland)	4410	3800	610
	Holtville, Imperial Co. (January planting)	5530	4620	910
	Holtville, Imperial Co. (December planting)	6170	6130	40
	Holtville, Imperial Co. (December planting)†	4150	4600	-450
1970	Meridian, Sutter Co.	1580	1300	280
	Isleton, Sacramento Co.	3540	3160	380
	Davis, Yolo Co. (Trial 1)	6210	6020	190
	Davis, Yolo Co. (Trial 2)	6680	6210	470
	Five Points, Fresno Co.	5820	5880	- 60
	Corcoran, Kings Co.	5200	5110	90
	Riverside, Riverside Co. (Irrigated)‡	1560	1270	290
	Riverside, Riverside Co. (Dryland)‡	1200	1180	20
	Holtville, Imperial Co.	3570	2250	1320
Mean of all trials		4594	4327	267*
Relative yield, per cent		106.2	100	

^{*} Yield of INIA 66R is significantly higher than INIA 66 at 1% level of significance. Standard error of difference between INIA 66R and INIA 66 is 92.2 lbs per acre.

AN IMPROVED VERSION of the popular wheat variety INIA 66 is now available to California growers. The new variety is INIA 66R—a high yielding selection from INIA 66.

INIA 66R was developed by the International Maize and Wheat Improvement Center with the cooperation of the Mexican Ministry of Agriculture. Both varieties came from a cross between Sonora 64 and Lerma Rojo 64 with the pedigree II 19008-83M-100Y-100M-100Y-100C-104C. It was designated D6840 in California tests.

California yield trials conducted during 1969 and 1970 found INIA 66R to be higher yielding than INIA 66 in 15 of 18 trials (see table). The yield advantage of INIA 66R (6.2%) over all trials was statistically significant.

INIA 66R is similar to INIA 66 in characteristics other than yield. It is an early maturing spring wheat, medium short to medium in height, and resistant to lodging. The spikes are fully awned with white glumes, semilax, and nodding. Kernels are large, semi-hard, and light red in color. Grain weight per bushel, like INIA 66, is greater than with most wheat varieties.

Its disease reaction is comparable with INIA 66, being resistant to stripe rust and many races of stem rust, but susceptible to bunt and barley yellow dwarf virus.

Quality laboratory results indicate that INIA 66 and INIA 66R are comparable

in milling and baking characteristics. The new variety is expected to be acceptable to the baking industry when flour produced from the variety meets normal quality standards.

INIA 66R should be adapted to all areas where INIA 66 has proved satisfactory. The variety can be used throughout California except for fall planting in the inter-mountain areas of northern California. INIA 66R is considered the best variety choice in areas where early maturity and stripe rust resistance are needed. In windy areas, some shatter losses can be expected from both INIA 66 and INIA 66R.

Certified seed is now available.

C. O. Qualset is Associate Professor; H. E. Vogt is Laboratory Technician, Department of Agronomy and Range Science; and J. D. Prato is Extension Agronomist, University of California, Davis. W. H. Isom is Extension Agronomist, U.C., Riverside; and W. F. Lehman is Associate Agronomist, Imperial Valley Field Station. J. A. Rupert is Research Associate in the Experiment Station and Geneticist, CIMMYT. The following people assisted in this study: farm advisors Sidney Kite, Wilson Pendery, Jack Orr, Leonard Buschmann, John Williams, Gerald St. Andre; and technicians Peter Sands and Michael Smith. Part of the funds used in evaluating INIA 66R were provided by grants from the California Crop Improvement Asso-

NEW PUBLICATIONS

ready for distribution

Single copies of these publications—except Manuals and books—or a catalog of Agricultural Publications may be obtained without charge from the local office of the Farm Advisor or by addressing a request to: Agricultural Publications, University Hall, University of California, Berkeley, California 94720. When ordering sale items, please enclose payment. Make checks or money orders payable to The Regents of the University of California.

CONSUMPTION PATTERNS FOR POTATOES, RICE, AND MACARONI IN NORTHERN CALIFORNIA, 1968. Bul 848. This bulletin describes survey findings concerning the prevailing use patterns for potatoes, rice, and macaroni products in Northern California during 1968, especially (1) the frequency of serving these foods in the home; (2) consumer buying habits and preferences regarding their use; and (3) consumer attitudes toward them. Attention is directed toward convenience products prepared from these three foods.

PETROLEUM MULCH STUDIES FOR ROW CROPS IN CALIFORNIA. Bul. 849. The results of many laboratory and field studies with petroleum mulch in terms of temperature, soil moisture, crop response, and weed control. A description of petroleum mulch, spray equipment, soil preparation, and general considerations for a successful mulching operation have been included.

[†] Combine-harvested plots.

[‡] Frost damage reduced yields.