

UNITED STATES DEPARTMENT OF AGRICULTURE  
 AGRICULTURAL RESEARCH SERVICE  
 Washington, D.C.

and

IDAHO AGRICULTURAL EXPERIMENT STATION  
 UNIVERSITY OF IDAHO  
 Moscow, Idaho

and

OREGON AGRICULTURAL EXPERIMENT STATION  
 OREGON STATE UNIVERSITY  
 Corvallis, Oregon

RELEASE OF TREASURE (PI 468962) SOFT WHITE SPRING WHEAT

Agricultural Research Service - USDA and the Idaho and Oregon Agricultural Experiment stations announce the release of 'Treasure' (PI 468962) soft white spring wheat to seed growers. Treasure was developed by ARS-USDA and the Idaho Agricultural Experiment Station. It was selected as an  $F_4$  head row from the cross Blueboy II/4/7\*Springfield/3/Asosan/Federation//A63167S-A-1-50-45-5/5/ID0016//Penjamo sib/Gabo 55. A63167S-A-1-50-45-5 is a sister selection of Twin and ID0016 was derived from the cross 2\*Lemhi 53 x Nainari 60.

Treasure was entered in the Idaho trials in 1979, in the Tri-State Nursery in 1982 as ID0248 and in the Western Regional Nursery in 1983 and 1984.

Treasure is a white glumed awned semi-dwarf variety with slightly better resistance to lodging than Owens. It is intermediate in maturity and heads 1, 2 and 4 days later than Twin, Dirkwin and Owens, respectively. It is 1 day earlier than Bliss. It is similar in height to Owens. The test weight of Treasure was 74, 76.1 and 73.1 kg/hl (57.5, 59.1 and 56.8 pounds per bushel) in the 5-year averages at the Aberdeen and Twin Falls irrigated and Tetonia dryland nurseries, respectively. Owens in the same trials averaged 75.6, 77.1 and 75.3 kg/hl (58.7, 59.9 and 58.5 pounds per bushel), respectively.

Treasure has been resistant to stripe rust, moderately susceptible to leaf rust, slightly more resistant to black chaff than Twin, Dirkwin and Owens, but less resistant than Bliss. It is similar to Owens in percent of kernel black point caused by *Alternaria*. It was originally thought to have resistance to Hessian fly but has since been found to be susceptible.

In ten station years of testing<sub>1</sub> in the Idaho irrigated nurseries, Treasure has averaged 349.8 and 316.1 kg ha<sup>-1</sup> (5.2 and 4.7 bushels per acre) higher than Owens and Dirkwin, respectively. In the five-year yield average in the Tetonia nonirrigated nursery it yielded 148 and 161 kg ha<sup>-1</sup> (2.2 and 2.4 bushels per acre) more than Owens and Dirkwin, respectively.

The milling and pastry quality of Treasure is superior to that of Owens. Treasure when grown under some conditions may be classified as a club wheat.