

## Super Dirkwin

### 1 PVP Application A9541S-10A-1

#### 2 Exhibit A, Origin and Breeding History of the Variety

3 A9541S-10A-1 is a backcross derivative of the recurrent parent 'Centennial' with  
4 the awnless characteristic transferred from the soft white spring wheat 'Dirkwin'. The  
5 pedigree of A9541S-10A-1 is Centennial\*4/Dirkwin. The backcrossing was conducted at  
6 Aberdeen, Idaho by the University of Idaho staff by repeatedly crossing Centennial to the  
7 awnless F<sub>1</sub> plants of the previous backcross (the awnless trait in wheat is dominant to  
8 awned). The third backcross, designated A9541S, was made in the University of Idaho,  
9 Aberdeen greenhouse in 1995. The BC<sub>3</sub>F<sub>1</sub> plants were planted in the field at Aberdeen in  
10 spring 1995 and the seed from 10 awnless BC<sub>3</sub>F<sub>1</sub> plants were threshed together and  
11 designated A9541S-10A. The composited BC<sub>3</sub>F<sub>2</sub> seed of A9541S-10A was planted at  
12 Aberdeen Idaho in 1996 and harvested in bulk, without selection. The bulk harvested  
13 BC<sub>3</sub>F<sub>3</sub> seed of A9541S-10A was planted in 1997 at Aberdeen and individual awnless  
14 heads harvested and threshed separately. Families of BC<sub>3</sub>F<sub>3,4</sub> seed from individual heads  
15 were planted in single rows in 1998 at Aberdeen. The selection A9541S-10A-1 was  
16 identified as a candidate for forage wheat use based on its late maturity and awnless  
17 head-type in the 1998 headrow nursery. Confirmation of the uniformity and late maturity  
18 for A9541S-10A-1 were made in 1999 in an unreplicated 43 m<sup>2</sup> plot planted at Aberdeen,  
19 ID.

20 A9541S-10A-1 was tested in replicated grain yield trials in southern Idaho from  
21 2000 to 2002 and forage trials in central California from 2002 to 2004. A9541S-10A-1 is  
22 uniform for plant type, with no observed variants, and has remained stable during five  
23 generations of evaluation, 2000 to 2004