Date:	February 1, 2004	
Plant Breeder:	Marcus Jacobson	
A: Identification: 1) Crop Kind and M	Iarket Class:	Soft White Common Winter Wheat
2) Selection No's.	93-1 x 9000	
3) Name	MJ-9	

4) Pedigree: Madsen/W-11

## **B:** General Situation

Dates

1) Use Type: Soft white common cookie, cake and pastry wheat

E-1----1 2004

**2) Description:** MJ-9 is a semi dwarf, stiff straw, white winter wheat originating from a selection of a cross of Madsen and a selection of the breeder called W-11. MJ-9 has a white glume with white awn and white or light colored straw. MJ-9 contains an awnless variant in a less than 1% frequency through out the crop

**3) Intention:** Targeted to the intermediate to high rainfall zone as supplement and or a replacement for Madsen winter wheat with better end use quality than Madsen.

## **C: General Agronomics:**

1) Agronomic performance: The average yield in the replicated WSU Cereal Variety Evaluations in two years, 2004 and 2005 was 106% of Madsen in high production areas. In the same trials under irrigation MJ-9 was 107% of Madsen. In lower rain fall or 60 bu. or less production areas MJ-9 yield was 83% of Madsen.

2) Other Agronomic Traits: MJ-9 contains an awnless variant in a less than 1% frequency through out the crop

a) Plant Height: 34 inches

**b) Heading Date:** MJ-9 is three days later in heading than Stephens and two days earlier in heading than Cashup

c) Test Weight: 57.5 in 2003 57.8 in 2004 (WSU Variety Testing Program)

d) Grain Protein Content: Grain protein content of MJ-9 is typically average for a soft white winter wheat with an average protein content of approximately 10%

**3)** Quality: Quality data from USDA/ARS Western Wheat Quality Lab has shown MJ-9 to have quality that maintains the quality of PNW wheat.

## 4) Resistance to Disease and Insects:

a) Stripe Rust: MJ-9 shows moderate resistance to stripe rust

b) Leaf Rust: MJ-9 shows resistance to leaf rust

c) Powdery Mildew: No data is available for assessment

d) Snow Mold: MJ-9 shows susceptibility to snow mold

**5)** Area of Adaptation: MJ-9 has broad adaptation to higher rainfall production areas in Oregon, southwestern Washington and northern Idaho.

## 6) Weaknesses:

7) Seed Source, Status, Availability: Breeder and Foundation seed stocks will be maintained by the breeder. MJ-9 will be sold as Foundation, Registered and Certified Seed class. Foundation, Registered and Certified seed stocks are available from the breeder and MJ-9 license holders.

Marcus Jacobson

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Pullman, Washington