

IDAHO CROP IMPROVEMENT ASSOCIATION, INC.

REQUEST FOR ACCEPTANCE OF A VARIETY INTO THE IDAHO SEED CERTIFICATION PROGRAM

1. Common Name of Variety: Name to be proposed, LAMONT
spring oat

Latin Name of Variety: Avena sativa L.

2. Origin of Variety: The spring oat selection 86Ab1616 originated at Aberdeen as an F4 head row from the cross 79Ab3811/S 7884. (The hulless parent 79Ab3811 was developed by Agricultural Research Service (ARS) at the University of Idaho Aberdeen Research and Extension Center from a cross of 69Ab1011/'Corbit' and S 7884 was developed by the University of Saskatchewan at Saskatoon, Saskatchewan.) The selection 86Ab1616 was developed cooperatively by USDA-ARS and the Idaho Agricultural Experiment Station. The selection has been evaluated in replicated trials in southern Idaho since 1988. It has also been tested in the Cooperative Naked Oat Test coordinated by H.G. Marshall as well as in various environments in California and Oregon under the direction of Resource Seeds, Inc. It was entered in the regional Uniform Northwestern States Oat Nursery in 1993.

3. Source of Stock Seed: Breeder seed of 86Ab1616 will be maintained at the University of Idaho Tetonia Research and Extension Center in cooperation with the USDA-ARS, Aberdeen, Idaho. The current breeder seed of 86Ab1616 originated as a bulk of 17 cut head rows grown in increase plots at the Tetonia Research and Extension Center in 1992. Foundation seed will be maintained primarily at the University of Idaho Tetonia Research and Extension Center.

4. Region of Adaptation and Intended Use: The selection 86Ab1616 is well adapted to irrigated and dryland production in southern Idaho. It is expected the selection will compete favorably with existing hulless spring oat varieties such as 'Pannuda' and 'Tibor' in a wide range of environments in Idaho as well as other western states. The new selection has a good yield record combined with good lodging and shattering resistance. It has good expression of the hulless trait in southern Idaho environments as well as satisfactory test weight. It is similar to 'Monida' in height, but heads about three days later than Monida.

5. Indicate Generation System to be Followed and Any Limitations on Life of Stand: Breeder, Foundation, Registered, Certified, or as specified by the University of Idaho.

6. Indicate if Limitation on Publication of Acreage or Growers is Desired: No restrictions.

7. Indicate Performance and Morphological Characteristics to Distinguish Variety: See attachment.

SELECTION NO. 86Ab1616

PARENTAGE: 79Ab3811/ S 7884

SOURCE: Aberdeen, Idaho

PROJECT LEADER: Darrell M. Weseberg (208) 397-4162

DESCRIPTION:

PROPOSED NAME: To be proposed.

Growth Habit: Spring, Midseason
 Panicle Type: Equilateral
 Kernel Color: Hulless
 Foliage Color: Blue-Green
 Juvenile Plant Growth:
 Leaf Sheath, Leaf Margins, and Culm Internodes:

HISTORY:

The spring oat selection 86Ab1616 originated at Aberdeen as an F4 head row from the cross 79Ab3811/S 7884. (The hulless parent 79Ab3811 was developed by Agricultural Research Service (ARS) at the University of Idaho Aberdeen Research and Extension Center from a cross of 69Ab1011/'Corbit' and S 7884 was developed by the University of Saskatchewan at Saskatoon, Saskatchewan.) The selection 86Ab1616 was developed cooperatively by USDA-ARS and the Idaho Agricultural Experiment Station. The selection has been evaluated in replicated trials in southern Idaho since 1988. It has also been tested in the Cooperative Naked Oat Test coordinated by H.G. Marshall as well as in various environments in California and Oregon under the direction of Resource Seeds, Inc. It was entered in the regional Uniform Northwestern States Oat Nursery in 1993.

AGRONOMIC CHARACTERISTICS:

Table 1. Summary of agronomic data for 86Ab1616 and selected spring oat varieties and selections grown under irrigation at Aberdeen, Idaho, 1990-93.

Entry	Yield (bu/A)	Test Weight (lbs/bu)	Height (in)	Heading Date (fr. Jan 1)	Lodging (%)	Kernel Weight (g/1000)
No. Years	4	4	4	4	3	2
86Ab1616*	180.3	42.4	45	184	9	25.9
Pennada*	122.7	41.7	34	171	2	25.2
Tibor*	155.2	41.3	50	176	9	32.3
88Ab3073*	158.1	43.7	38	182	6	20.5
Otana	217.1	42.2	48	179	27	36.0
Monida	238.4	41.9	45	181	33	37.5
Ajay	218.9	41.0	33	181	1	37.2

* Hulless oat.

Table 2. Summary of data for expression of the hullless trait, beta-glucan content, and protein content for 88Ab3073 and selected spring oat varieties and selections grown under irrigation at Aberdeen, Idaho, 1990-93.

Entry	Yield (bu/A)	Hullless Percent		Beta-Glucan (%)	Protein (%)
		Field Run (%)	Cleaned (%)		
No. Years	4	3	4	1	1
88Ab3073*	158.1	89.3	97.0	4.9	22.3
Penruda*	122.7	59.5	76.3	5.2	23.3
Tibor*	155.2	77.1	87.3	4.5	22.5
86Ab1616*	180.3	79.6	91.1	4.0	18.7
Otana	217.1	---	---	---	---
Monida	238.4	---	---	---	---
Ajay	218.9	---	---	---	---

* Hullless oat.

November 1993