

## 1996 COARC FORAGE RESEARCH SUMMARY

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### **Alfalfa Variety Trial**

The alfalfa variety trial was planted in August of 1995. Three cuttings were harvested in 1996. There are 25 varieties that range in fall dormancy from 2 to 4. Yield is being measured, and will be correlated to pest resistance ratings and fall dormancies. Stand establishment and vigor were rated subjectively by visual observation in the fall of 1995.

### **Alfalfa Variety x Fall Dormancy x MSC Trial**

This trial has 8 varieties that have a fall dormancy range of 1 to 5 and was planted in August of 1995. Yield (3 cuts) and quality (Cut 1 & 2) will be correlated to mean stage count (MSC), pest ratings, and fall dormancy. Stand establishment and vigor were rated subjectively by visual observation in the fall of 1995.

### **Irrigated Agro/EcoZone Grass Species Trial**

Twenty six species and varieties of grass were planted in August of 1994. Three cuttings were harvested in the second year of this trial. The objective of this trial is determine the adaptation of species, and compare yield for each cutting, as well as seasonal yield for hay. Height, lodging, and maturity data have been recorded.

### **Alfalfa Response to Vitazyme**

Vitazyme, a product manufactured by Vital Earth Company in Texas, was applied at the rate of 13 oz./a to individual cuttings (three cut trial) of alfalfa. Yield and quality response to Vitazyme was tested at the COARC, Powell Butte site.

### **Dryland Agro/EcoZone Grass and Legume Demonstration (Tim Deboodt, Coleader)**

Up to 82 different species and varieties of grasses, legumes, and forbes were planted at the COARC, Powell Butte and Madras, Bob Hagerty farm, Redmond, and two sites at the Dick Bedortha Ranch at Paulina. Single plots of 5 x 20 feet, with 5 rows, were planted either in the fall of 1994 (COARC - Madras and Powell Butte and irrigated to establish only) or February (totally dependent upon rainfed conditions) of 1995. Hycrest Crested wheatgrass was planted as borders to use as a comparison within the demonstration plot and from site to site. Adaptation to these different areas of Central Oregon and "what do they look like" are the main objectives of this demonstration, so better recommendations can be made in the future.

### **Long Term Weed Control Effects on Alfalfa Production**

The sixth year was completed in 1996. Five weed management strategies were applied to a late summer (1990) and early summer (1991) planting of alfalfa. Yield, quality, plant stand, stems per square foot, and percent weed (broadleaf and grass) invasion on each cutting are the data being collected. Dependent upon funding, the trial may be run for one to three more years. When the trial is completed, an economic analysis will be done. A sister trial at the Klamath Experiment Station, under the direction of Dr. Randy Dovel, was completed after five years.