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Species highlights

Ryegrass. Oregon’s Willamette Valley produces nearly all the ryegrass seed grown in the United States. This seventh-ranked Oregon agricultural crop is well adapted to poorly drained soils on which alternative crops are very limited. Sales of ryegrass seed amount to $100 million in recent years. Close to half the value of the Nation’s ryegrass seed is grown in Linn County.

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Kentucky bluegrass. Over 80% of the Nation’s bluegrass seed is produced in the Northwest. Widely used as a turf grass in the cooler climates, bluegrass is also used for many lawns in our cities and rural communities. Bluegrass is also exported, though in smaller quantities than bentgrass and chewings fescue.

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Extension Service, Oregon State University, Corvallis, O.E. Smith, director. This publication was produced and distributed in furtherance of the Acts of Congress of May 8 and June 30, 1914. Extension work is a cooperative program of Oregon State University, the U.S. Department of Agriculture, and Oregon counties.

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Background on Oregon's Grass and Legume Seed Industry
S.D. Miles and W.C. Young

The grass seed industry and the economy
Grass and legume seeds produced in Oregon are an important component of the State's economy. Producing 40 to 50% of the Nation's grass and legume seeds, Oregon growers have rung up $210-230 million in farmgate sales in recent years (see table 1). These sales are especially important to those producing these commodities—but the importance of their production doesn't stop at the point of initial sale. As the money from these initial sales flows through the economy, in successive rounds of spending, additional income is generated and the impact is magnified.

Oregon seeds dominate national production
The superior quality of Oregon-grown seeds has made them famous throughout the world. Oregon has more than 450,000 acres in seed production, and over 80% of these acres produce seeds for which Oregon's growers are the Nation's leading producers. The bulk of Oregon's seed production comes from grass seeds produced in the Willamette Valley.

Grass seeds dominate Oregon production
More than 400,000 acres in Oregon are used for grass seed production. Sales from these acres equals almost $200 million

Table 1.—Seed acreage and sales in Oregon, 1989

<table>
<thead>
<tr>
<th>Commodity</th>
<th>Acres</th>
<th>Value (x $1000)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Annual ryegrass</td>
<td>112,000</td>
<td>43,420</td>
</tr>
<tr>
<td>Perennial ryegrass</td>
<td>106,000</td>
<td>59,020</td>
</tr>
<tr>
<td>Tall fescue</td>
<td>85,000</td>
<td>42,980</td>
</tr>
<tr>
<td>Kentucky bluegrass</td>
<td>30,800</td>
<td>13,460</td>
</tr>
<tr>
<td>Fine-leaf fescue</td>
<td>27,900</td>
<td>12,510</td>
</tr>
<tr>
<td>Orchardgrass</td>
<td>22,400</td>
<td>9,180</td>
</tr>
<tr>
<td>Bentgrass</td>
<td>14,000</td>
<td>15,650</td>
</tr>
<tr>
<td>Other grasses</td>
<td>12,380</td>
<td>3,060</td>
</tr>
<tr>
<td>Red clover</td>
<td>24,230</td>
<td>7,990</td>
</tr>
<tr>
<td>Alfalfa</td>
<td>10,000</td>
<td>5,760</td>
</tr>
<tr>
<td>Crimson clover</td>
<td>7,400</td>
<td>2,930</td>
</tr>
<tr>
<td>Other legumes</td>
<td>5,890</td>
<td>1,700</td>
</tr>
<tr>
<td>Total</td>
<td>458,000</td>
<td>217,660</td>
</tr>
</tbody>
</table>

Staying competitive
Because of increasing costs of production and the threat of competition from other domestic and foreign production areas, Oregon's seed producers must employ the most modern cultural methods along with sound management practices in order to stay competitive. Yields and seed quality must be high to make seed production profitable enough for individual operations to stay in business.

Proprietary protection program
Since the establishment of the Plant Variety Protection Act in 1970, private plant breeders have a proprietary protection program that grants exclusive right to produce and market seed of sexually reproduced plants for 18 years. This has encouraged dramatic progress in the genetic improvement of a number of cool-season grasses, particularly those cultivars used for turf. As a result, the demand for turf-type proprietary varieties has increased markedly during the past 10 years.

The combined higher market price and higher yields of some new varieties have contributed to an expanded total acreage of grass seed crops.

Production practices are changing
Although the Willamette Valley is ideal for grass seed production, disease problems limited the growth of the industry during its infancy. Openfield burning was developed as a solution to disease problems, and it has continued to keep incidence of disease at low levels. However, the
threat of seed-borne diseases (ergot, blind seed, and seed gall nematode) remains a concern today.

Public concern over air pollution from smoke during the field burning season in the Willamette Valley has resulted in some restriction on field burning, and it may further reduce the number of acres burned.

Open-field burning has declined from a 1968 high of 315,000 acres (including some grain acreage) to 165,000 acres in 1989. Over this same time period, total acreage of grass seed crops in the valley has increased by over 130,000 acres, from 240,000 in 1968 to 370,000 in 1989.

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Species highlights

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Annual ryegrass seed, over 60% of all ryegrass seed production, is used to a great extent in the South for winter overseeding of lawns, pastures, and rice and cotton fields.

Perennial ryegrass acreage has increased greatly in the past 5 years, from 62,000 acres in 1985 to 105,000 acres in 1989. The reasons are proprietary development and improved turf-type varieties. Nearly all the seed is used in central and eastern States for turf seeding.

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