Area of Adaptation

Strawberry clover (Trifolium fragiferum) is best adapted to wet, saline soils in the western part of the United States. It is tolerant of flooding and soils too highly saline for other crops, but it also grows well on the neutral or moderately acid soils of western Oregon. Since it is tolerant of alkaline soils, strawberry clover can be grown under irrigation for production east of the Cascades.

Primary Use

Strawberry clover is used principally as a pasture plant on poorly drained, saline, or alkaline soils of eastern Oregon where white clover is not well adapted. Under these conditions, use strawberry clover in combination with tall fescue or alkali grass. Strawberry clover is palatable and suitable for all types of livestock, resembling white clover in growth habit and appearance of leaves on stems. The low-grazing stoloniferous (runner-bearing) nature of strawberry clover will tolerate close grazing, but the clover seldom gets tall enough to harvest for hay. Strawberry clover, like many legumes, will cause animals to bloat if necessary preventative measures are not taken.

Varieties

Most varieties of strawberry clover originate in Australia. These varieties are better adapted to western Oregon. Palestine is a large and productive variety, but it lacks the winter hardiness needed in eastern Oregon. Salina was released by the California Agricultural Experiment Station and is the only United States named variety, having been developed from selections of Palestine. Using seed produced in the area where you expect to plant it will ensure adaptability.

Establishment

Strawberry clover is somewhat slow to establish. On tilled seedbeds, sow seed early in the spring when the soil has thawed. On ground that has had no preparation except mowing and removing vegetation, you can sow seed in early spring or in late winter. You may broadcast or drill it ¼ inch deep.

The seedcoats of strawberry clover are hard; even after hulling, as much as 40 to 75 percent of the seed often remains hard. Except when unhulled seed is sown in early winter on untilled ground, scarify the seed before planting.

On normal soils, spring-seed strawberry clover with a companion grain crop if the availability of irrigation water assures an ample supply of moisture throughout the season. On saline soils, barley is the only small grain

<table>
<thead>
<tr>
<th>Use</th>
<th>Precipitation</th>
<th>Seeding rate</th>
<th>Companion species</th>
<th>Companion species seeding rate</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pasture</td>
<td>inches</td>
<td>lb/A</td>
<td></td>
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<tr>
<td></td>
<td>wetlands,</td>
<td>4</td>
<td>tall fescue</td>
<td>10-12</td>
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<tr>
<td></td>
<td>30 to 60,</td>
<td>4</td>
<td>perennial ryegrass</td>
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<tr>
<td></td>
<td>or irrigated</td>
<td>4</td>
<td>orchardgrass</td>
<td>10-12</td>
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that can be used as a companion crop. Other small grains are not tolerant of high-salt concentrations.

Fertility and pH Requirement
Liming to achieve a pH of 6.0 or using lime-pelleted seed is recommended. Adequate phosphorus and sulfur should also be available, as strawberry clover requires a high level of fertility for high production. Properly inoculated and nodulated strawberry clover-grass pastures will not require the addition of nitrogen. Early spring application of small amounts of N (40 lb) will stimulate early growth of grass but will favor the grass over the legume. Specific recommendations based upon soil test data are provided in OSU Fertilizer Guides 1, 38, and 58.

Management
The stoloniferous (runner-bearing) nature of strawberry clover will tolerate close grazing after plants are well established. Close grazing (2 inches) will help strawberry clover to compete with other vegetation and encourage the clover to spread. Fall management should allow for adequate regrowth before the winter to insure good winter survival.