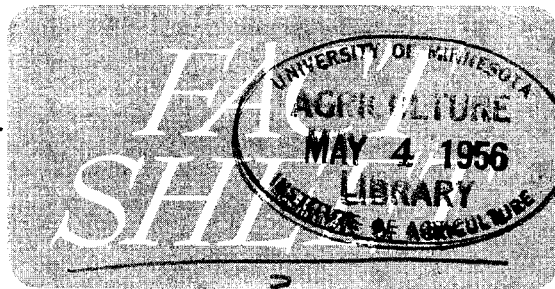


# farm and home

UNIVERSITY OF MINNESOTA  
*Agricultural Extension Service*  
 U. S. DEPARTMENT OF AGRICULTURE



AGRONOMY

No. 4

## Using Ladino Clover in Minnesota

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Ladino clover is proving its great value on many Minnesota farms. This highly nutritious, palatable, giant white clover is a comparative newcomer to the list of legumes available for live-stock feed production in Minnesota.

Ladino is similar to common or wild white clover in all characteristics, except that the vegetative parts are enlarged. Leaf size, stem thickness, and plant height may be two to four times that of common white clover. Ladino spreads by seed and by thick, fleshy, creeping stems which root at the nodes to form new plants. These stems will vary in size from about the thickness of the lead in an ordinary pencil to just slightly smaller than the pencil itself. A single plant, growing under favorable conditions, may spread to occupy 10 to 12 square feet in a single year.

The seed of Ladino clover is yellow in color and extremely small; a pound contains about 400,000 seeds. These seeds cannot be distinguished from seed of common white clover.

Ladino clover is perhaps the most nutritious of all legumes since only the leaves and flowers are eaten when grazed. Crude protein content above

30 per cent is not uncommon before flowering, while crude protein after full bloom is probably above 20 per cent.

### Adaptation

Ladino clover should be used in mixtures with other legumes and grasses. **It should not be used as the only legume in a legume-grass mixture.** Two such mixtures are given in Table 1.

Table 1. Legume-grass mixtures using Ladino clover

Mixture	Remarks
<b>WELL-DRAINED, NON-DROUGHTY SOILS</b>	
<i>Legume</i>	
Alfalfa .....	Best mixture for flexible use, pasture, silage or hay. Double the rate of Ladino if primary use is for poultry or hog pasture.
5 lbs.	
Red clover .....	
2 lbs.	
Alsike .....	
1/2 lb.	
Ladino .....	
1/2 lb.	
<i>Grass</i>	
Brome grass .....	
6 lbs.	
Timothy .....	
2 lbs.	
<b>MODERATELY DRAINED SOILS</b>	
<i>Legume</i>	
Red clover .....	For pasture, silage or hay
4 lbs.	
Alsike .....	
2 lbs.	
Ladino .....	
1/2 lb.	
<i>Grass</i>	
Brome grass .....	
6 lbs.	
Timothy .....	
2 lbs.	

Ladino clover can be grown successfully in combination with reed canarygrass on wet soils, if the canarygrass is grazed or clipped often to prevent excessive shading. Many times an early clipping in the spring will favor Ladino clover production.

When it is in mixtures that will be used for hay only, the percentage of Ladino may be decreased considerably because of excessive shading by the taller growing grasses. Because of its high succulence (80 to 35 per cent moisture), stands with a high percentage of Ladino are difficult to cure for hay.

Ladino clover is best suited to fertile, heavy soils of high moisture-holding capacity. Because of its rather shallow root system, it is best adapted to moist soils and soils that don't dry up early in prolonged dry spells. Even during dry spells Ladino clover responds possibly faster than any other legume in re-initiating its growth. Good stands have been established and good yields obtained on fertile upland soils with well distributed rainfall.

Successful Ladino clover production is found over the entire state. However, the higher rainfall areas of South-eastern, Central, Northeastern and Northern Minnesota seem to provide

Ladino clover, as shown on the left, makes considerably larger growth than Wild White Dutch clover, as shown on the right. The two types of clover were grown under the same conditions.



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