

Plant hay barley early

Summary: Striking differences were observed in barley forage yields due to late planting. Barley hay yields declined for every day of planting after April 20

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BOZEMAN -- Feed prices are expected to climb in 2007, and livestock producers are viewing low-cost forage crop options for backgrounding and winter feed. For economical crop production under dryland conditions, many growers will look to reducing costs of inputs including tillage, seed, fertilizer and herbicides. Cereal crops used for hay appear to be good rotation crops in a grain production system.

Andy Lenssen, USDA-ARS research weed ecologist at Sidney, evaluated 'Haybet' barley production seeded into dryland re-crop barley near Froid in 2004 and 2005. Planting occurred on three dates between April 20 and June 15. Barley was planted into either a conventionally-prepared seedbed or into zero-tilled standing stubble that was sprayed with glyphosate. All seeding and fertility rates were held constant across the different treatments. At the milk stage of barley growth, barley and weed biomass were harvested and forage quality was evaluated on all treatments.

Barley hay yields ranged from about 0.5 to 4.0 tons per acre.

Striking differences were observed in barley forage yields due to late planting. Barley hay yields declined by 26 to 103 pounds of dry matter per acre for every day of delayed planting past April 20, depending on the crop year and planting method. Weed biomass at harvest was minimal for the first and second planting dates (32 to 273 pounds per acre). However, weed biomass at harvest for the June 15 planting date ranged from 213 to 2,511 pounds per acre. In no-tilled plots where glyphosate was not applied, weed biomass for the late-planted barley was 1.3 to 2.8 tons per acre, exceeding the barley yield.

Hay barley yield appears to suffer consequences due to late planting similar to grain yields. Growers are encouraged to plant hay barley as early as possible when other small grains are being planted. In these trials, adequate levels of nitrogen, phosphorus and potassium were supplied according to soil tests (70, 50, and 43 pounds per acre, respectively).

While not evaluated in this trial, forage yield of cereals is fairly well correlated with nitrogen fertility levels. Most producers growing dryland cereal forages are not using in-crop herbicides. It appears that early planting with light tillage or burn-down herbicides are effective in reducing weed populations. Also, earlier harvest dates due to early planting will result in haying many weeds prior to seed development. For these reasons, early-planted and well-managed hay barley is very useful in a crop rotation to provide livestock feed and limit weed populations.

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