

Registration of 'Valier' Barley

'Valier' barley (*Hordeum vulgare* L.) (Reg no. CV- , PI-) was developed by the Montana Agricultural Experiment Station and released for commercial production in February 1999. It is a selection from the cross 'Lewis/Baronesse'. The initial cross was made in Bozeman, MT in 1991. Seed was increased from 58 randomly isolated F₆ plants in 1994. These 58 lines were utilized in a series of linkage analysis and quantitative trait loci mapping experiments. The objectives were to determine the locations of genes from 'Baronesse' that are responsible for its agronomic superiority and the locations of genes which could possibly have an affect on feedlot performance characteristics. 'Valier' was line 30 of the 58 member population. Headrow-derived F₉ plots were grown at Bozeman, MT in the spring of 1998. Twenty-eight of these were bulked together to form the variety 'Valier'.

'Valier' is a two-rowed, white-kerneled, midseason spring barley. It has midlax, midlong spikes that are semi-nodding to erect before and after maturity, similar to 'Baronesse'. The spike has rough awns, glume awns are equal to the length of the hair-covered glume. Kernels have adhering, finely wrinkled hulls. Rachillas have long hairs. Unlike its parent, 'Baronesse', 'Valier' retains sterile lateral florets. 'Baronesse' is deficient for lateral florets. 'Valier', like 'Baronesse', flowers nearly two days earlier than its maternal parent, 'Lewis'. 'Valier' frequently develops a distinctive characteristic of red-tipped awns. 'Valier' is approximately two centimeters shorter than 'Lewis', with corresponding greater lodging resistance.

In 19 location*years' trials, the yield of 'Valier' was approximately 10% greater than 'Harrington', which is the most commonly grown barley variety in Montana. 'Valier' also produced grain of higher test weight than 'Harrington'. 'Valier' was developed specifically for excellent agronomic performance and improved cattle feeding characteristics. In a 20 calf per treatment evaluation, 'Valier' - fed calves gained weight 10% more rapidly than their half-siblings fed either 'Lewis' or 'Baronesse'.

Foundation and Breeders seed of 'Valier' will be maintained by the Montana Foundation Seed Stocks. Varietal Protection under Title V of the Plant Variety Protection Act is being sought. Foundation and Registered classes of seed will be available to growers and seed dealers in spring 2000.

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Post-it* Fax Note	7671	Date	1-18-00	# of pages	2
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Valier

Valier moves up to the second most popular feed variety in 2006, representing 1.8 percent of the total acreage or 14,200 acres seeded in Montana. Released in 1999 and developed by Montana State University, Valier is a two-rowed, white aleurone, mid-season maturity barley. The spike has long rough awns equal to the length of the hair-covered glume. Kernels have adhering, finely wrinkled hulls and long rachilla hairs. Valier retains sterile lateral florets.