REGISTRATION OF WL 309 ALFALFA¹
(Reg. No. 66)

D. F. Beard and I. I. Kawaguchi²

'WL 309' alfalfa (Medicago sativa L.) was developed by the Waterman-Loomis Company and made available for testing in 1968. The parentage of WL 309 traces to the same populations from which 'WL 306' was developed. After one additional cycle of screening for resistance to naturally occurring biotype (s) of the pea aphid (Acyrthosiphon pisum (Harris)) in Maryland and California and to biotype (s) of the spotted alfalfa aphid (Therioaphis maculata (Buckton)) found in Kern County, California, 14 plant selections were combined to form WL 309. WL 309 is more resistant to these pests than WL 306. It was tested as experimentals 67 cage G and 67 cage J prior to 1970.

The primary use of WL 309 is for hay or green chop. It is adapted to the same areas as 'Buffalo' and to adjacent areas north of Buffalo's main area of adaptation. In forage trials WL 309 produced about .56 metric tons/ha per year more hay than WL 306. WL 309 is similar to WL 306 in fall dormancy but superior to it in winter survival. Bacterial wilt resistance is only slightly less than that of 'Vernal.' The flower color of WL 309 is approximately 40% purple, 20% blue, and 40% variegated with a trace of yellow and white flowers.

Breeder seed is the combination of parent clones produced under cage isolation with honeybees used as pollinators. Foundation seed is produced in fields planted with breeder seed between the 37° and 44° parallels. Certified seed will be produced in fields planted only with breeder or foundation seed. No other class or generation of seed will be recognized.

WL 309 was favorably reviewed by the National Certified Alfalfa Variety Review Board at its December 1972 meeting.

¹Registered by the Crop Science Society of America. Received Dec. 7, 1973.
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REGISTRATION OF KLAGES BARLEY¹
(Reg. No. 138)

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'KLAGES' barley (Hordeum vulgare L.), Cl 15478, was developed cooperatively by the Agricultural Research Service, USDA and the Idaho Agricultural Experiment Station. It was released in April 1973 by these agencies and the Oregon Agricultural Experiment Station. The USDA Barley and Malt Laboratory, Madison, Wisconsin and the Malting Barley Improvement Association (MBIA), Milwaukee, Wisconsin cooperated in testing malting and brewing quality.

Klages is from a cross of 'Betzes'/'Domen,' made at the Aberdeen Branch Experiment Station in 1958. It is a composite of 35 F₃ lines selected from the bulk population designated 60Ab1810. The lines considered for inclusion in the composite were evaluated in replicated trials at Aberdeen and Twin Falls in 1970. 60Ab1810 was derived from an F₉ selection made at Aberdeen in 1960 and subsequently tested in southern Idaho trials and in the Western Two-Row Barley Nursery.

Klages is a two-rowed, midseason, white-kerneled, spring malting barley. It has lax, midlong to long spikes with rough awns, long rachilla hairs, and hairy rachis edges. The hull is adhering and finely wrinkled, with weakly developed barbless veins. The glume is covered with long hairs, and the glume awn is approximately equal to the length of the glume. The crease is narrow and shallow at the base, flaring toward the awn end, and generally with a well-defined fold. It has good straw strength, test weight, and kernel weight when grown under irrigation. Compared with 'Proline,' it is slightly superior in lodging resistance under irrigation, is similar in height, and

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Published March, 1974