REGISTRATION OF 'UC 337' BARLEY

'UC 337' spring barley (Hordeum vulgare L.) (Reg. no. 218, PI 537305) was developed by the California Agricultural Experiment Station and released in 1985. It has high grain yield, good standability, and good field resistance to diseases.

UC 337 is an advanced line of an F5 selection from the cross, 'Sutter'/Norum'/Norum*4/White Mildew Resistant 'California Mariout'. The latter is an experimental line derived from the cross, California Mariout*4/CI 1179/2*California Mariout*6/'Club Mariout'. Following preliminary yield tests in 1976 to 1978 at the University of California, Davis Agronomy Farm, UC 337 was entered in 5 to 9 statewide regional tests per year from 1979 to 1985. In 33 station-years of testing, grain yield of UC 337 averaged 125% of 'Briggs', 117% of 'Prato' and 109% of 'UC 476'. UC 337 was significantly superior to all three cultivars in straw strength and in resistance to the major foliar diseases that occurred in these trials. It is 1 to 3 d earlier in maturity and 5 to 9 cm taller than UC 476 and Prato.

UC 337 is a six-rowed, smooth awned, spring-type feed barley. It is medium-early in maturity and has moderately strong straw that is medium in height. The spike is medium-dense, midlong, and semierect. The large covered kernels have a blue aleurone and a long rachilla with few long hairs, mainly at the tip.

UC 337 has good resistance to scald (incited by Rhynchosporium secalis [Oudem.] J.J. Davis), net blotch (incited by Pyrenophora teres Drechs.), and barley yellow dwarf virus (BYDV), possessing the Yd2 gene. It is moderately resistant to leaf rust (incited by Puccinia hordei G. Otth.) and moderately susceptible to powdery mildew (incited by Erysiphe graminis D.C. f.sp. hordei Em. Marchal).

Foundation seed was released to growers in 1986. Breeder seed will be maintained by the Department of Agronomy and Range Science in cooperation with the Foundation Seed and Plant Materials Service, University of California, Davis, CA 95616.

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Reference and Notes

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REGISTRATION OF 'UC 603' BARLEY

'UC 603' spring barley (Hordeum vulgare L.) (Reg. no. 220, PI 537576) was developed by the California Agricultural Experiment Station and released in 1988. It is an advanced line of an F5 selection from the cross, 'Mari'/Luther//TraillF/3/'Briggs'/'Prato' Sib. The parental line, Mari/Luther//Traill, was a short, stiff-straw experimental selection obtained from R. A. Nilan, Washington State University. The cross was designed to combine early maturity and stiff straw with a good level of disease resistance.

Following preliminary yield tests on the University of California, Davis Agronomy Farm in 1981 to 1983, UC 603 was entered in 5 to 9 statewide regional yield trials per year from 1984 to 1988. In 31 station-years of testing under medium rainfall and/or irrigated environments, grain yields of UC 603 averaged 84, 91, and 105% of 'UC 337', 101% of 'UC 476' and 105% of Prato. In 11 station-years tests in low rainfall environments, grain yields of UC 603 averaged 95% of 'UC 337', 101% of 'UC 476' and 105% of Prato. In 11 station-years tests in low rainfall environments, grain yields of UC 603 averaged 95% of 'UC 337', 101% of 'UC 476' and 105% of Prato.

UC 603 is a six-rowed, semismooth awned, and spring-type feed barley. It is an early maturing, short-strawed cultivar with straw strength and test weight, and was 4 to 5 cm taller than Prato.

UC 476 is a six-rowed, semismooth awned, medium-early feed barley. It is medium-late, medium height, and moderately strong straw. The spike is medium-dense, midlong, and semierect. The large covered kernels have a white aleurone and a long rachilla with few long hairs.

UC 476 has good resistance to scald (incited by Rhynchosporium secalis [Oudem.] J.J. Davis), powdery mildew (incited by Erysiphe graminis D.C. f. sp. hordei Em. Marchal), and to net blotch (incited by Puccinia hordei G. Otth.).

Foundation seed was released to growers in 1988. Breeder seed will be maintained by the Department of Agronomy and Range Science in cooperation with the Foundation Seed and Plant Materials Service, University of California, Davis, CA 95616.

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