Registration of Crop Cultivars

REGISTRATION OF ‘REDDY’ RED CLOVER

‘REDDY’ red clover (Trifolium pratense L.) (Reg. no. 22), is a hay and pasture use cultivar developed by FFR Cooperative and released in 1984. Its experimental designation was FFR Syn L, and it was also tested as FFR Syn 1004 in various university trials. Seed will be available through commercial channels in 1986.

Public and commercial red clover cultivars were established on FFRs research farm at Battleground, IN, in the early 1970s. In 1976, open pollinated seed of vigorous surviving plants of this material was harvested, bulked, and designated FFR Syn L.

Reddy is a medium red clover possessing both water marked and nonwater marked leaves. It flowers somewhat earlier in the spring than ‘Kenstar’, and a few days later than ‘Redman’ and ‘Arlington’. Reddy has been rated equal to Redman and Arlington in resistance to northern anthracnose (caused by Erysiphe polygoni) and powdery mildew (cause by Erysiphe polygoni DC). Forage yields of Reddy have been equal to or slightly above those of Redman and Arlington in FFR and university trials. It has been tested in the north central and eastern USA and has shown good adaptation throughout these areas.

Reddy will be produced as a three-generation cultivar with breeder, foundation, and certified seed classes. Breeder seed will be maintained by FFR Cooperative. Reddy was favorably reviewed by the National Certified Miscellaneous Legume Variety Review Board in May 1984. Application will not be made for Plant Variety Protection.

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References and Notes

1. Forage breeder, West Lafayette, IN; forage breeder, Salem, OR; forage research director, and former red clover breeder, FFR Cooperative, West Lafayette, IN 47906. Registration by the Crop Sci. Soc. of Am. Accepted. Accepted 19 July 1985.

REGISTRATION OF ‘CHINOOK’ HOP

‘CHINOOK’, a new hop (Humulus lupulus L.) (Reg. no. 15) cultivar was released by the USDA-ARS and the Washington, Oregon and Idaho Agricultural Experiment Stations in May 1985.


Chinook was tested as selection W421–38 for 9 yrs. in single-hill and five-hill plots at the Roza unit of the Irrigated Agriculture Research and Extension Center, Washington State University, Prosser, WA. At this location, it showed good agronomic characteristics and good yield potential. During this period, selection W421–38 averaged over 12% alpha acid content and 3.5% beta acid content. The co-humulone content was 31%. After 24 weeks storage at room temperature, over 70% of the original alpha acid content remained in the dried, compressed hops, indicating good storage stability of the soft resins.

Selection W421–38 has been tested in five-hill plots near Toppenish, WA, Corvallis, OR, and Wilder, ID, since 1980. At these locations it averaged over 13% alpha acid and 3.8% beta acid.

Between 1982 and 1984, a 0.8 ha commercial trial of W421–38 near Toppenish averaged 2240 kg/ha of hops with an average alpha acid percentage of 14.1. Similarly sized commercial trials were established near Wilder, ID, Granger, WA, and Silverton, OR, in 1983. The 1984 yields and alpha acid percentages were 2900 kg/ha and 14.0%, 2850 kg/ha and 14.9%, and 800 kg/ha and 13.2%, respectively. The apparent production potential of Chinook is 2500 kg/ha in Idaho and Washington; the production potential of fully-mature plants in Oregon is unknown, but judging from five-hill experimental plots it would likely be commercially satisfactory. Chinook compares favorably to the 5-yr Washington and Idaho hop production averages of 2200 kg/ha and 1800 kg/ha, respectively.

Chinook is an early to medium-early maturing cultivar, which maintains its quality past maturity. It has excellent spring regrowth and good vigor. Although the shoots are coarse, the long internodes are flexible, which facilitates training. The bines cling well to the string and climb readily. The leaves are dark green and the bine is marked with dark purple ridges that become lighter during the growing season. The lateral branches average 1.0 to 1.5 m in length.

Chinook produces large, heavy hops that are evenly distributed on the upper half of the plant. Seedless cones averaged 37 to 48 mm in length and 280 to 460 mg in dry weight. The bracts are dark green, obovate, and average 17 to 22 mm in length; the bracteoles are light green, lanceolate, and average 13 to 18 mm in length. The cones are borne in loose clusters on the lateral branches, and thus, are easily picked and cleaned. Their large size often results in a shorter drying time compared with other cultivars. The lupulin is dark yellow and has an average alpha acid homolog composition of 60% humulone, 31% cohumulone, and 9% adhumulone. Oil content averages 1.6% of the dried hops. The composition of the major essential oils averages 40% myrcene, 20% humulene, and 9% caryophyllene. The hops have a rich, pronounced aroma. Brewing evaluations of Chinook have been favorable.

Chinook is moderately resistant to hop downdy mildew (incited by Pseudoperonospora humuli Miy. et Tak., G. W. Wils). It is free of prunus necrotic ringspot virus and apple mosaic virus. Chinook appears to have some resistance to two-spotted spider mite and hop aphid attack.

Virus-free clones of Chinook will be maintained by the Irrigated Agriculture Research and Extension Center, Prosser, WA 99350.

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References and Notes