REGISTRATION OF CROP CULTIVARS

REGISTRATION OF H61-467 SUGARCANE
(Reg. No. 46)

Don J Heinz, Hans K. Meyer, and Kuo Kao Wu

CLONE 'H61-467' sugarcane (Saccharum spp. hybrid) was selected by the staff of the Experiment Station, Hawaiian Sugar Planters' Association, from a progeny derived from random pollination of 'H53-2793' in a polycross involving many cultivars adapted to the windward Hawaiian ecological region. H61-467 contains germplasm from S. officinarum L., S. sinense Roxb. amend. Jeswiet, and S. spontaneum L.

H61-467 is a 24-month crop cultivar with high tonnage and average to poor sucrose content. In its area of adaptation, H61-467 is nonflowering. H61-467 has medium stalk diameter and is excellent in tillering and ratooning. This cultivar is very tolerant to the substituted urea and s-triazine herbicides and it can withstand drought.

H61-467 is highly resistant to both races of culmicolous smut (Ustilago scitaminea Syd.) present in Hawaii, eye spot [ Bipolaris sacchari (Butler) Shoemaker], leaf scald (Xanthomonas albilineans (Ashby) Dowson), mosaic (virus, Hawaiian strain), and moderately resistant to brown spot (Cercospora longipes Butler), red rot (Physalospora tucumanensis Speg.), and pineapple disease [Ceratocystis paradoxa (de Seynes) Moreau].

In replicated yield trials H61-467 outyielded 'H50-7209' (1) and 'H59-3775' (2), the standard Hawaiian commercial cultivars, in sugar per acre on the Hamakua Coast of the Island of Hawaii. In field blocks, this cultivar has yielded equal to or better than the present commercial cultivars.

H61-467 is adapted on the Hamakua Coast of the Island of Hawaii up to 300 m in elevation and is expected to increase rapidly in this area. This cultivar is equal to H50-7209 and H59-3775 in yield trials in the leeward regions of Hawaii and will be increased there because of its high resistance to smut disease. Vegetative cuttings will be maintained by the Experiment Station, Hawaiian Sugar Planters' Association, Aiea, Hawaii.

REFERENCES


REGISTRATION OF CP 70-321 SUGARCANE
(Reg. No. 48)

H. P. Fanguy, P. H. Dunckelman, and Lawrence Butler.

'CP 70-321' sugarcane, a tri-species hybrid involving S. officinarum L., S. spontaneum L., and S. barberi L. was selected from the cross CP 61-39 × CP 70-321. CP 70-321 was developed through cooperation between AR-SEA-USDA, the Louisiana Agricultural Experiment Station, and the American Sugar Cane League.

CP 70-321 is recommended for culture on soils in Louisiana. It is a high sucrose, medium sugar content var. It equaled the leading commercial cultivars in tons of cane/ha, sugar/ton of cane, and sugar tests on light-textured soils, but yielded slightly lower in tons of cane/ha than the leading commercial cultivars on heavy soils. CP 70-321 is recommended for culture on soils in Louisiana.