REGISTRATION OF CROP CULTIVARS

REGISTRATION OF H61-467 SUGARCANE¹ (Reg. No. 46)

Don J Heinz, Hans K. Meyer, and Kuo Kao Wu²

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. Jesweit, 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 [Ceratoxystis paradoxa (de Seynese) 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 H62-4671 SUGARCANE¹ (Reg. No. 47)

H. P. Fanguy, P. H. Dunckelman, and R. D. Bieaux

Clone 'H62-4671' sugarcane (Saccharum spp. hybrid) was selected by the staff of the Experiment Station, Hawaiian Sugar Planters' Association, from a selection from the cross 'CP 61-39' x 'CP 57-614'. The cross was made at Canal Point, Ha., during the 1963 crossing season.


H62-4671 is a 24-month crop cultivar with high sucrose content. It is relatively slow growing in the first year, fair in tillering, large in stalk diameter, and has a better than average ratio of tons cane/ha to sugar/ton of cane compared to other Hawaiian cultivars. H62-4671 is a nonflowering cultivar, very tolerant to the substituted urea and s-triazine herbicides. It germinates satisfactorily as well as the standard Hawaiian commercial cultivars 'H50-7209' (2) and 'H59-3775' (3), but it is susceptible to brown spot and eye spot (Butler Shoemaker), and susceptible to broom 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 [Ceratoxystis paradoxa (de Seynese) Moreau].

In replicated yield trials, H62-4671 has outyielded H50-7209 and H59-3775 in sugar per acre, and it showed equal to superior yield potential in commercial field blocks. H62-4671 will be increased rapidly on Oahu, Maui, and Kauai, replacing H59-3775. It is especially adapted to drip-irrigated fields. Vegetative cuttings will be maintained by the Experiment Station, Hawaiian Sugar Planters' Association, Aiea, Hawaii.

REFERENCES

REGISTRATION OF CP 70-321 SUGARCANE¹ (Reg. No. 48)

H. P. Fanguy, P. H. Dunckelman, and R. D. Bieaux

'CP 70-321' sugarcane, a tri-species hybrid of Saccharum officinarum L., S. spontaneum L., and S. barberry L., was selected from the cross 'CP 61-39' x 'CP 57-614'. The cross was made at Canal Point, Fl., during the 1963 crossing season. In 1968, CP 70-321 was developed through cooperative research of AR-SEA-USDA in cooperation with the Louisiana Agric. Exp. Stn., the American Sugar Cane League, and the American Sugar Cane League.

CP 70-321 is recommended for culture on light and heavy soils in Louisiana. It is a high sucrose, moderately erect cultivar. It equaled the leading commercial cultivars in tons of cane/ha, sugar/ton of cane, and sugar/ha in 46 replicated yield trials in Louisiana. CP 70-321 is suited to machine harvesting with a tendency toward brittleness. CP 70-321 contains germplasm from S. spontaneum L. CLONE 'H62-4671' sugarcane (Saccharum spp. hybrid) was se-