Seed cane of CP 70-324 will be maintained at the Texas A&M Research and Extension Center, Weslaco, TX.

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References and Notes


REGISTRATION OF ‘H73-7324’ SUGARCANE

Sugarcane (Saccharum spp. hybrid) clone ‘H73-7324’ (Reg. no. CV-86, PI 553069) was selected by the staff of the Experiment Station, Hawaiian Sugar Planters’ Association (HSPA), from progeny derived from random pollination of H57-0225 in a modified polycross made in 1972 involving many clones adapted to the unirrigated Hawaiian ecological region. H73-7324 contains germplasm from S. officinarum L., S. spontaneum L., S. sinense Roxb., and possibly S. robustum Brandes & Jeswiet ex Grassl.

H73-7324 is adapted to upper elevation, unirrigated areas on the island of Hawaii, where cane is normally harvested at 30 to 36 mo of age. It has high cane tonnage and above-average sucrose content compared to H56-4848, the major commercial clone grown in this environment. It is average in tillering, is somewhat pale in appearance, and has an above-average growth rate. Although considered a heavy-flowering clone at the HSPA breeding station in the Maunawili Valley on Oahu, H73-7324 is highly unlikely to flower at upper elevations where it is best adapted. The cane condition of H73-7324 at harvest is excellent; it exhibits less stalk damage from rats (Rattus spp.) and borers (New Guinea weevil, Rhabdoscelus obscurus) than do most of the clones tested under long growth (≥30 mo) conditions.

After seven yield trials in upper elevation fields, H73-7324 produced an average of 6% more cane and 10% more sugar than H56-4848, and is considered to exhibit moderate drought tolerance, better than the irrigated commercial clone grown in this environment, namely ‘H65-7052’ (1). It is a good-tillering, fast-growing light-flowering clone in most irrigated environments. Its stalk is average in diameter. H74-4527 ratoons at least as well as H65-7052, and it is tolerant to s-triazine herbicides. H74-4527 tends to exhibit drought stress symptoms more quickly than other commercially important irrigated clones, suggesting that it is not particularly drought tolerant. It is recommended only for irrigated environments.

After 50 advanced yield trials, H74-4527 produced an average of 2% more cane and sugar than H65-7052 of variety x environment experiment (n = 12), exhibited relatively little response to changes in environment (b = 0.76). It has consistently been more on Kauai and Oahu (6% greater sugar yield) than on Maui (10% less), compared with H65-7052.

H74-4527 is resistant to smut (see above), common rust (caused by Puccinia melanocephala Syd. & P. Syd.).

Vegetative cuttings will be maintained by the Experiment Station, Hawaiian Sugar Planters’ Association, Aiea, HI 96701.


REGISTRATION OF ‘H74-4527’ SUGARCANE

Sugarcane (Saccharum spp. hybrid) clone ‘H74-4527’ (Reg. no. CV-87, PI 553070) was selected by the staff of the Experiment Station, Hawaiian Sugar Planters’ Association (HSPA), from progeny derived from random pollination of H48-4605 in a polycross made in 1973 involving several commercial-type clones selected on the basis of resistance to culmicolous smut (caused by Ustilago scitaminea Syd. & P. Syd.). This polycross, formed immediately following the discovery of smut in Hawaii, was designed to increase the frequency of smut-resistant clones in the selection program. H74-4527 contains germplasm from S. officinarum L., S. spontaneum L., S. sinense Roxb., and possibly S. robustum Brandes & Jeswiet ex Grassl.

H74-4527 is normally harvested at 24 mo of age. It has cane tonnage and sucrose content equal to the major irrigated commercial clone grown in this environment, namely ‘H65-7052’ (1). It is a good-tillering, fast-growing, light-flowering clone in most irrigated environments. Its stalk is average in diameter. H74-4527 ratoons at least as well as H65-7052, and it is tolerant to s-triazine herbicides. H74-4527 tends to exhibit drought stress symptoms more quickly than other commercially important irrigated clones, suggesting that it is not particularly drought tolerant. It is recommended only for irrigated environments.

After 50 advanced yield trials, H74-4527 produced an average of 2% more cane and sugar than H65-7052 of variety x environment experiment (n = 12), exhibited relatively little response to changes in environment (b = 0.76). It has consistently been more on Kauai and Oahu (6% greater sugar yield) than on Maui (10% less), compared with H65-7052.

H74-4527 is resistant to smut (see above), common rust (caused by Puccinia melanocephala Syd. & P. Syd.).

Vegetative cuttings will be maintained by the Experiment Station, Hawaiian Sugar Planters’ Association, Aiea, HI 96701.