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Identification of the fragrant strain ATCC 46892 as Neurospora sitophila

Abstract

Neurospora strains were among the various fungi isolated by Park et al. (J. Ferment. Technol. 60: 1-4, 1982) from naturally fermented cassava used to make the indigenous alcoholic beverage tiquira in Maranhao State, Brazil. One strain, deposited as ATCC 46892 and also available as FGSC 6673, was shown by Yoshizawa et al. (Agr. Biol. Chem. 52: 2129-2130, 1988) to have a pleasant fruity odor attributed to ethyl hexanoate. This strain has been the subject of numerous studies concerning production and application of the substance, including pilot studies of the possible use of 46892 in Japan for producing koji and saki (Yamauchi et al. Agric. Biol. Chem. 53: 821-825, 1989). I obtained the strain and crossed it to standard species testers of *N. crassa* and *N. sitophila*. The crosses to both *A* and *a* mating types of *N. crassa* were infertile, but the cross to an *N. sitophila* A tester, FGSC 5940, gave abundant asci with black viable ascospores, showing that 46892 is conspecific and that it does not carry the *N. sitophila* element Spore killer-1.

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Identification of the fragrant strain ATCC 46892 as *Neurospora sitophila*

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