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Fungal Genetics Stock Center Department of Microbiology University of Kansas Medical Center Kansas City, KS 66103

I am depositing five <u>Neurospora crassa</u> strains that I have isolated to the Stock Center. These are apparently novel mutants, which are impaired in the synthesis of polyunsaturated fatty acids. The strains have been designated '<u>pfa</u>' in analogy to the <u>ufa</u> mutants, which are impaired in the synthesis of all unsaturates.

The strains mapped as follows in crosses to <u>alcoy;csp-2</u>:

pfa-1, chromosome VII

pfa-2, IV/V

pfa-3, IV/V

pfa-4, VII

pfa-5, 1/11

I have so far been unsuccessful at obtaining fertile crosses for more extensive mapping. The above mutants are progeny from backcrosses to wild-type strain 74-OR8-1a. The original lines were obtained by mutagenesis of the strain 74-OR23-1A. None appear to be allelic, based on heterokaryon tests. However, interpretation of these tests was ambiguous since the cultures are unstable, reverting spontaneously to wild type. In the case of pfa-1 and pfa-2, the progeny appear to be more severely affected than the original isolates, and resemble ufa mutants, but again appear to be distinct from the known ufa mutants. Further information on these strains will be published soon in the journal Microbiology.

The enclosed strains are heterokaryons with the  $\underline{a^{m1}}\underline{ad-3B}$   $\underline{cyh-1}$  strain (FGSC 4564). If the cultures fail to grow, or if you need further information, please contact me.

Marta Tanrikulu

USDA/ARS/Western Regional Research Center

800 Buchanan Street

Mulifantur

Albany, CA 94710

ph. (510) 559-5627

FAX (510)559-5777