A new, highly fertile microconidiating combination, dingy, fluffy

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Abstract
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This new mutants and stocks is available in Fungal Genetics Reports: https://newprairiepress.org/fgr/vol26/iss1/3
A new, highly fertile microconiditating combination, dingy, fluffy.

When the linkage group IV marker dingy (38502d, Mitchell and Mitchell 1954 PNAS 40) is substituted for peach, the double mutant $dn; fl$ resembles $pe; fl$ phenotypically, producing no macroconidia and abundant grey, uninucleate microconidia. Unlike $pe; fl$, the new combination is highly fertile in homozygous crosses and as a female parent. Perithecia and ascospores are produced as quickly and abundantly as in crosses between wild types or fluffy strains. The new genotype thus appears promising as a substitute for $pe; fl$, especially where microconidiating strains are to be intercrossed.

Stocks are available from FGSC ($dn; fl$ A, No. 3517; $dn; fl$ a, No. 3518). = = = Department of Biological Sciences, Stanford University, Stanford, CA 94305.

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Additional special purpose stocks.


Tester stocks with distal markers

$ro-7$ rip. A, $\alpha$  IIR, III R  FGSC Nos. 3467,3468

$rip; dqw; trp-2$ A, $\alpha$  IIR, III R, V I R  FGSC Nos. 3313,3314

The temperature-sensitive mutant rip (ribosomal protein defective; isolation No. 4M. loco, Neurospora Newsl. 22, 1975) has been mopped at the extreme right end of II, near but not allelic to un-15. It is readily scoreable on lightly inoculated slants at $34^\circ$ (no growth) vs. $25^\circ$ (normal growth). As a II R marker, rip seems superior to un-15, which it excels in vigor, growth rate, and fertility. It has therefore been substituted for un-15 in various tester strains.

The morphological mutant ro-7 (ropy; isolation No. R2470) mops at the left end of II very near pi, to which it may be preferred as a III R marker, since ro-7 conidiates and grows more vigorously. ro-7 is female-fertile.

cys-10 mat A, $\alpha$  NL, R  FGSC Nos. 2615,2616

Although the morphological mutant mat is not as far right as uvs-2, it may be more convenient for scoring in some marker combinations.

chol-2 ylo-1 ws-1 A, $\alpha$  VII, L, R  FGSC Nos. 3519,3520

Because ws-1 is the most distal gene marker in VIR, well right of trp-2, this combination may be preferable to chol-2 ylo-1 trp-2. Linkage is scored among the progeny from black ascospores, which are mostly ws+. Efficiency is decreased slightly because a few percent of m- ascospores darken on aging so as to resemble ws+ and be capable of germinating.

(Note: In Neurospora Newsl. 20, 1973, ocr-7 was listed incorrectly as a distal VIR marker. The supposed linkage in VI could not be confirmed, and map location of ocr-7 is still unknown.)