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## One-Liners

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## One-Liners

### Abstract

One liners from: N.M. Martinez-Rossi, C. Andrade-Monteiro and S.R.C. Pombeiro; M. Orbach ; H. Liu and T.J. Schmidhauser; P.A. Hubbard and C.H. Wilson

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# ONE LINERS

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Master Strain E of *Aspergillus nidulans*, which carries genetic markers in all eight linkage groups, is frequently used in crosses to map new genes. The strain carries the *facA303* mutation in linkage group V, which makes it unable to use acetate as a carbon source. A new marker conferring resistance to p-fluorophenylalanine (120 ug/ml) was identified in linkage V of this strain. The observed recombination frequency between *fpa* resistance and *facA303* was about 17%. The existence of two mutations in linkage group V of Master Strain E presents alternatives for the genetic analysis of new mutants. Thanks are due to Professor John Clutterbuck for sending us a new sample of Master Strain E.

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I published size estimates for the chromosome DNAs of strain 74-OR23-1A in 1988 (MCB 8:1469-1473) based on the relative sizes of the *N. crassa* aceto-orcein stained pachytene chromosomes combined with *Schizosaccharomyces pombe* chromosome size markers. The sizes of the *S. pombe* chromosome chromosomes have now been more accurately measured as 3.5, 4.6 and 5.7 mb, causing a change in the *N. crassa* size estimates. The revised Neurospora chromosome sizes are:

Chromosome Band	Linkage Group	Size (former estimate)
1	I	10.3 Mb (12.6 Mb)
2	V	9.2 Mb (10.9 Mb)
3	IV	5.7 Mb (7 Mb)
4	III	5.1 Mb (6 Mb)
5	II	4.6 Mb (4.6 Mb)
6	VI, VII	4.0 Mb (4.0 Mb)

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We probed colony blots of the Orbach/Sachs library with a *tub-2* specific probe from pSV50. Positive wells were confirmed by use of the *tub-2* probe on a southern blot of digests of plasmid DNA isolated from each positive well. The *tub-2* containing isolates are G14:11C, G15:1E, G15:3C, X15:4H and X18:12D.

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In 1980, D.R. Stadler deposited several temperature sensitive methionine mutants at FGSC (see Neurospora Newslett. 28:18). One of them, *met(29T)* (FGSC 3761), appears to be an occurrence of *cys-3*. It responds to cysteine and methionine, maps to LG II, and forms asci in which four spores fail to darken. A cross of *met(29T)* to *cys-3* yielded mostly non-viable spores. 20/100 spores germinated within 10 days of being shot. These germinants grew on minimal medium at

25 C and on minimal + methionine at 34 C, but not on unsupplemented medium at the higher temperature.