Correction to note on linkage data for new ser mutants in NN #21

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Abstract
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Kinsey, J.A. Three new p-fluorophenylalanine resistant (fpr) mutants.

in on su(mtr) background, fpr-3 in su(mtr) (18-11) and fpr-4 in su(mtr) (17-2). fpr-5 was isolated in the wild type strain 74-OR23-1A background. All three mutants are characterized by resistance to FPA on su(mtr) background. Table 1 compares the growth of the three new mutants with that of fpr-1, mtr (1d) and fpr-3 in various media.

fpr-3 is on linkage group III, close to the trp-I locus. Spires that did not require tryptophan were isolated from a cross of trp-I (10575) x fpr-3 and tested for recombination between trp-I and fpr-3. From there tests fpr-3 appears to be 0.35 centimorgans from trp-I (568 trp+ spores tested; germination 96%). Segregation for trp-I and fpr-3 in 100 random spores was normal.

fpr-4 is on linkage group V. Linkage was estimated by a plating technique. fpr-4 and inl appear to be 11 centimorgans apart. On the basis of the segregation of an unselected marker (pob-1) in recombinants, fpr-4 appears to be distal to inl.

fpr-5 is on linkage group I. Two crosses of fpr-5 to al-2 were analyzed, with 28% recombination in one cross (total of 60 random spores tested; 87% germination) and 22.5% recombination (80 spores; 96% germination). Segregation of a third marker (arg-1) indicated that fpr-5 is proximal to al-2.

fpr-3 has normal amino acid uptake through both System I and System II. (Systems defined by Pall (1969 Biochim. Biophys. Acta 173: 113)). Amino acid uptake of fpr-4 and fpr-5 has not been tested.

Table 1. Growth response of fpr mutants

<table>
<thead>
<tr>
<th></th>
<th>Minimal</th>
<th>indole</th>
<th>indole</th>
<th>FPA</th>
<th>4MT</th>
</tr>
</thead>
<tbody>
<tr>
<td>wild type</td>
<td>+</td>
<td>+</td>
<td>+</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>mtr (1d)</td>
<td>+</td>
<td>+</td>
<td>+</td>
<td>+</td>
<td>+</td>
</tr>
<tr>
<td>fpr-1</td>
<td>+</td>
<td>+</td>
<td>+</td>
<td>4</td>
<td>+</td>
</tr>
<tr>
<td>fpr-3</td>
<td></td>
<td>+</td>
<td>0</td>
<td>+</td>
<td>0</td>
</tr>
<tr>
<td>fpr-4</td>
<td>+</td>
<td>+</td>
<td>+</td>
<td>+</td>
<td>+</td>
</tr>
<tr>
<td>fpr-5</td>
<td>+</td>
<td>+</td>
<td>+</td>
<td>+</td>
<td>-</td>
</tr>
</tbody>
</table>

All growth tests were performed on Vogel's Medium N agar with 1.5% sorbose, 0.1% glycerol and 0.1% glucose. The concentration of FPA was 10 µg/ml; indole was 50 µg/ml and 4-methyltryptophan (4MT) was 60 µg/ml. Good growth is scored +; poor growth —; no growth 0.

We wish to correct an error that was made in reporting the crosses used to study ser-5 (JBM-9), described in Maxwell et al., 1974 NN #21.

It was incorrectly stated that the crosses used were: Stock A; se (JBM-9); cot-1 (C102t) was crossed to FGSC #190: A; sc (5801), trp-1 (10575) to FGSC #116: A; ser-1 (H605).

The correct description of the crosses is: A sexual reisolate of se, (JBM-9) of genotype A; se, (JBM-9); cot-1 (C102t) was crossed to FGSC #190: A; se, (5801), trp-1 (10575) and to FGSC #116: A; ser-1 (H605).

The source of the sexual reisolate of ser (JBM-9) was a cross of the original mutant to FGSC #333: A; cot-1 (C102t); inl (37401); yl0 (Y30539y); nt (C86). — Department of Biology, California State University, Northridge, California 91324.