RESISTANCE SOURCES

Finger millet genotypes resistant to blast

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Finger millet [Eleusine coracana (L.) Gaertn] is a major small millet and forms a staple food source in southern Karnataka. One of the most important constraints in the production of this crop is blast disease [Pyricularia grisea (Cke.) Sacc]. A large world collection of finger millet germplasm was evaluated over a period of three years and results are presented herein.

The seeds of over 3000 germplasm lines were sown during kharif 2000-03 with the three replications having a plot size of 3x2.5 mts in Bangalore. The susceptible checks HR-374, HR-911, Indaf-9, K7 and PR-202 were planted between every two test entries as infector rows alternatively and also grown across the test lines on either border. The blast incidence was expressed as per cent neck and/or fingers affected by blast. The lines showing <2% mean incidence over three years were treated as resistant. The following genotypes were found resistant to both neck and finger blast.

<table>
<thead>
<tr>
<th>Resistance level</th>
<th>Genotypes*</th>
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<tbody>
<tr>
<td>Resistant (&lt;2%)</td>
<td>GE Nos. 510 (E2-2-1), 568 (E2-7-1), 669(E1012; Africa), 496 (316; IND-MP), 532 (E2-3-2), 942 (IE 453), 965 (PE367; IND-UP), 1014 (V 117; IND-KAR), 1029 (TAH 409; IND-KAR), 1044 (HR 309-4; IND-KAR), 1126 (IE 24), 1328 (P 226; Africa) and 1409 (P 249; Africa).</td>
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*NBPGR accession number and origin are given in parenthesis

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