

| Symbol                           | Information   | Source  | Evidence | Reference     |
|----------------------------------|---|---------|----------|---------------|
| <b>inflorescence</b>             |   |         |          |               |
| <input type="checkbox"/> cg      | cigar shaped panicle, gene from <i>Oryza sativa</i>                               | Gramene | IMP      | GR_ref:3965   |
| <input type="checkbox"/> Cl      | Clustered spikelets, gene from <i>Oryza sativa</i>                                | Gramene | IMP      | GR_ref:1793   |
| <input type="checkbox"/> CYP88A3 | ENT-KAURENOIC ACID HYDROXYLASE 1, gene from <i>Arabidopsis thaliana</i>           | TAIR    | IEP      | PMID:11172076 |
| <input type="checkbox"/> d1      | dwarf-1, gene from <i>Oryza sativa</i>  | Gramene | IMP      | GR_ref:6145   |
| <input type="checkbox"/> d10     | dwarf-10, gene from <i>Oryza sativa</i>   | Gramene | IMP      | GR_ref:5792   |
| <input type="checkbox"/> Gi      | Gigantea, gene from <i>Oryza sativa</i>   | Gramene | IMP      | PMID:12040096 |
| <input type="checkbox"/> lth     | Inhibitor for difficult threshing (easy threshing), gene from <i>Oryza sativa</i> | Gramene | IMP      | GR_ref:5861   |
| <input type="checkbox"/> lgp     | light green panicle and leaf, gene from <i>Oryza sativa</i>                       | Gramene | IMP      | GR_ref:6122   |
| <input type="checkbox"/> Mi1     | Minute grain-1, gene from <i>Oryza sativa</i>                                     | Gramene | IMP      | GR_ref:4413   |
| <input type="checkbox"/> mi2     | minute grain-2, gene from <i>Oryza sativa</i>                                     | Gramene | IMP      | GR_ref:6375   |
| <input type="checkbox"/> N1642   | Ler-1 (Landsberg erecta-1), germplasm from <i>Arabidopsis thaliana</i>            | NASC    | IMP      | NASC:N1642    |
| <input type="checkbox"/> N3111   | M3385S, germplasm from <i>Arabidopsis thaliana</i>                                | NASC    | IMP      | NASC:N3111    |
| <input type="checkbox"/> N3191   | germplasm from <i>Arabidopsis thaliana</i>  | NASC    | IMP      | NASC:N3191    |
| <input type="checkbox"/> N3255   | germplasm from <i>Arabidopsis thaliana</i>  | NASC    | IMP      | NASC:N3255    |
| <input type="checkbox"/> N3865   | germplasm from <i>Arabidopsis thaliana</i>  | NASC    | IMP      | NASC:N3865    |

**B.**

Summary for Gene: cg (GR:0060117)

General Info | Allele and Germplasm | Ontology Association | References

|                      |  |
|----------------------|--|
| General Information  | Accession: GR:0060117<br>Gene Symbol: cg<br>Gene Name: cigar shaped panicle<br>Species: Rice<br>Gene Type: Not sequenced<br>Has Phenotype: yes<br>Description: Cigar-shaped panicle results from extremely shortened main axis, rachis and rachillae of branches. Acute angles at origin of branches. Panicles remain compact even after maturity. Dwarf height is associated with cigar-shaped panicle, which produces short, small grain, indicates pleiotropic gene action.                                     |
| Allele               | cg 1<br>Germplasm  |
| Ontology Association | Trait: panicle type (TO:0000089), seed length (TO:0000146), seed size (TO:0000391), stem length (TO:0000576)<br>Plant Structure: inflorescence (PO:0009049), seed (PO:0009010), stem (PO:0009047)<br>Growth Stage: O4-stem elongation stage (GRO:0007048), O5-booting stage (GRO:0007148), O6-heading stage (GRO:0007044), O7-milk stage (GRO:0007046), O8-dough stage (GRO:0007042), O9-mature grain stage (GRO:0007045)<br>Biological Process: development (GO:0007275), unidimensional cell growth (GO:0009026) |
| Reference            | DBxref: Oryzabase: 46<br>Seetharaman-R, Srivastava-D.P., Inheritance of semi-dwarf stature and cigar shaped panicle in rice.   |

**C.**

Allele: ckh1-1

Locus: ckh1

**Phenotype**

increased sensitivity to cytokinin, callus growth in tissue culture exhibit typical cytokinin responses including rapid proliferation and chloroplast development in response to lower levels of cytokinins than in the wild type; short inflorescences and primary roots when grown in soil; backcrossed once to Ler.

**Ontology annotation using Plant Ontology (PO) and PATO**

Select the plant ontology term to see other *Arabidopsis* lines associated with this phenotype.

|               |                                 |
|---------------|---------------------------------|
| Entity        | Value                           |
| inflorescence | ShortHeightValue (PATO:0000569) |
| primary root  | ShortLengthValue (PATO:0000574) |

**References**

Kubo, M.; Kakimoto, T.; The cytokinin-hypersensitive genes of *Arabidopsis* negatively regulate the cytokinin-signaling pathway for cell division and chloroplast development. *Plant Journal* 2000;23:385-394