TriMEDB

retrieved mapped EST data

marker	PCR primers
marker name	accession ID
marker name	sequence

in silico PCR

similarity search (BLASTn)

| marker name | representative sequence of UniGene, TIGRGI, HarvEST and PlantGDB of wheat and barley assigned |
| marker name | original sequence |

mapping to rice genome (SIM4)

GFF3 format data with those of RAP-DB for Gbrowse

Gbrowse

similarity search results

assembly (CAP3)

| marker name | TriMEDB Contig ID |
| TriMEDB Contig ID | sequence |

assemble viewer

| marker | chromosomal location |

Cmap format data

Cmap

TriFLDB

retrieved putative TriFLCDS data

| TriMEDB Contig ID | TriFLCDS name |
| TriFLCDS name | TriMEDB Contig ID |

similarity search (BLASTn)

mapping to rice & sorghum genome

GFF3 format data with those of RAP-DB & Sbi for Gbrowse

Gbrowse

similarity search (BLASTn)

| TriFLCDS name | representative sequence of wheat and barley |

similarity search results

| TriFLCDS name | FLcDNA sequence |
| TriFLCDS name | CDS sequence (GenPept) |

Longest frame & DECODER

TriFLCDS name	CDS region
	deduced protein sequence
	protein sequence (GenPept)

BLASTx

| TriFLCDS name | similarity search result to protein dataset |

iprscan

| TriFLCDS name | domain search result |

iprscan domain structure

predicted GO

TAIR	modeled protein sequence
RAP	
Sbi	

iprscan

TAIR	domain search result
RAP	
Sbi	

cd-hit

| protein cluster id 30%, 60%, 90% | grouped protein sequence ids |

hierarchical cluster Viewer

clustalw

multiple alignment

multiple alignment

similarity search (BLASTn)

| dbEST | EST sequence |

| TriFLCDS name | assigned ESTs of barley and wheat |

assembly (CAP3)

| TriFLCDS name | TriFLDB clustered ESTs |

assemble viewer

Supplemental Figure S3. A schematic diagram of the database structure of TriFLDB together with that of TriMEDB. The upper part is basically the same as presented in supplemental Fig s2 of Mochida et al. (2008), who investigated TriMEDB. The current version of TriFLDB and its relationship with TriMEDB (blue arrows) are depicted in the diagram showing the data handling and generated relational tables of the datasets with the corresponding web interfaces.