

SUPPLEMENTAL FIGURE LEGENDS

Supplemental Figure 1. A. AtGeneExpress microarray experiment description with tissue sample description using PSO term *cotyledon* (PO:0020030) indicated as the tissue source at NASCarrays. **B.** The PO accession number for term *cotyledon* is hyperlinked to NASC term detail page where a user can find all other annotations to the term *cotyledon* displayed at the NASC database.

Supplemental Figure 2. Annotations to the PSO term *inflorescence*. **A.** Each line represents a separate annotation entry. Columns are defined as following: “Symbol” is an abbreviated name (symbol) of the object type, either a gene or germplasm/stock, which is annotated to the PSO term (e.g., N3865 and cg, outlined in red); “Information” contains the full name of the gene or germplasm/stock and the species name. “Source” indicates the name of the database which contributed the association to this PSO term; hyperlink to the detail page of the individual databases at which the annotation was created allows an easy shift from the POC database to species-specific databases and vice versa. **B.** Rice *cigar shaped panicle* (*cg*) gene detail page at Gramene is shown at the bottom left; and **C.** *Arabidopsis thaliana* germplasm detail page for N3865 (allele *ckh1-1*) at NASC is shown at the bottom left.

Supplemental Figure 3. Ontology browser term detail view for the term *inflorescence* (PO_0009049). Information about each term includes term name, unique identifier (accession number), specific aspect of PO, synonyms, definition, curator’s comment and term lineage.