



**Fig. S8.** Phenotypic characterization of the spikelet in the *Osmads2-1 Osmads6-1*, *Osmads4-1 Osmads6-1* and *Osmads2-1 Osmads4-1 Osmads6-1* mutants

(a) to (c) Spikelet morphology (1-4) and schematic diagram (5) of *Osmads2-1 Osmads6-1* (a), *Osmads4-1 Osmads6-1* (b) and *Osmads2-1 Osmads4-1 Osmads6-1* (c).

Aqua blue arrowheads indicate glume-like structures; Orange arrowheads indicate lodicule-stamen mosaic organs; Light yellow arrowheads indicate abnormal pistils. a-pi, abnormal pistil; bop, body of palea; fl, floret; gll, glume like organ; le, lemma; lo, lodicule; l-s, lodicule-stamen mosaic organ; mrp, margin region of palea; pa, palea; rg, rudimentary glume; sl, sterile lemma; sp, spikelet; v, vascular bundles. All scale bars are 2 mm.