



**Figure S4.** Decomposition rate of crop straws. S<sub>7500</sub>: mulching straw amount 7500 kg/ha, S<sub>11250</sub>: mulching straw amount 11250 kg/ha, S<sub>15000</sub>: mulching straw amount 15000 kg/ha. The different lowercase letters in the figure indicate significant differences between the different treatments based on the bidirectional ANOVA tests ( $P < 0.05$ ).