

## The supplemental material includes one table

**Supplemental Table 1** The clay mineral composition of soil aggregates under different fertilization before ( $[-\text{H}_2\text{O}_2]$ ) and after ( $[\text{+H}_2\text{O}_2]$ ) soil organic c carbon oxidation

Treatments		Clay mineral composition		
		Chlorite (%)	Illite (%)	Quartz (%)
	CK*	20	32	32
$[-\text{H}_2\text{O}_2]$	NPK	27	32	30
	NPKS	21	29	36
	CK	22	32	32
$[\text{+H}_2\text{O}_2]$	NPK	24	31	38
	NPKS	24	27	36

\*CK, no fertilization; NPK, inorganic NPK fertilizers; NPKS, inorganic NPK fertilizers plus straw return.