Supplementary material

Characterization of dissolve organic matter distribution in forestland and farmland of mollisol based on untargeted metabolomics

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Table S1 Physico-chemical properties of the mollisol soils.

	Forestland	Farmland
pH	4.86	5.25
OM (g kg^{-1})	175.33	44.82
DOC (mg kg^{-1})	439.02	115.91
CEC (cmol kg^{-1})	61.71	25.33
Salinity (mg kg^{-1})	0.25	0.16
TN (g kg^{-1})	7.10	2.23
NO_3-N (mg kg^{-1})	1.13	1.48
NH_4-N (mg kg^{-1})	36.90	18.84
TP (g kg^{-1})	2.89	1.08
TK (g kg^{-1})	9.23	16.30
AN (mg kg^{-1})	551.25	271.95
AP (mg kg^{-1})	29.68	35.24
AK (mg kg^{-1})	243.00	106.00
AS (mg kg^{-1})	26.00	9.80
Fe (g kg^{-1})	38.61	29.37
Mn (g kg^{-1})	1.47	0.72
Sand (%)	16.36	6.68
Silt (%)	51.80	65.88
Clay (%)	31.84	27.44

Note: OM: organic matter; DOC: dissolved organic carbon; CEC: cation exchange capacity; T: total; A: available.

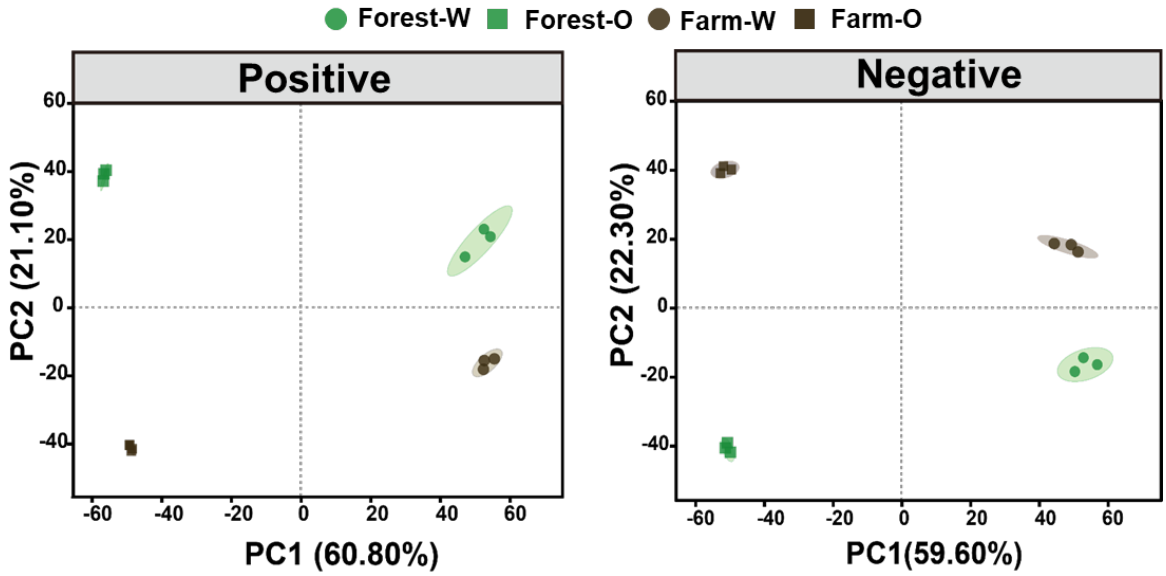

Fig. S1. The principal component analysis of dissolved organic matter (DOM) in mollisol soils. Positive and negative are positive ion and negative ion respectively. Forest-W: DOM extracted with water in the forestland; Forest-O: DOM extracted with organic reagents in the forestland; Farm-W: DOM extracted with water in the farmland; Farm-O: DOM extracted with organic reagents in the farmland.

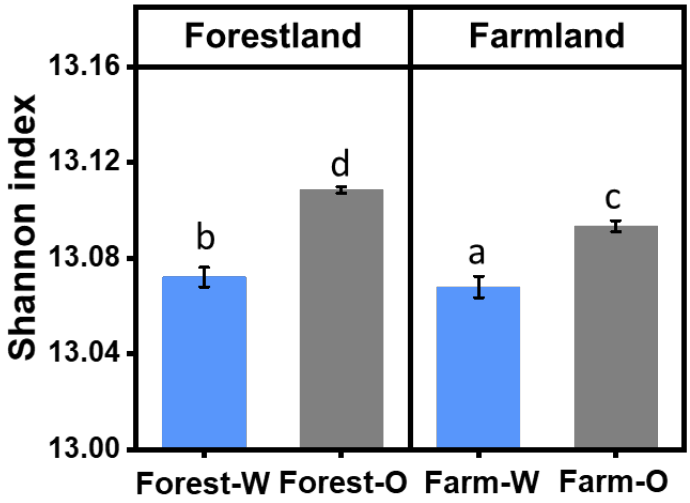

Fig. S2. The Shannon index of dissolved organic matter (DOM) in mollisol soils. Forest-W: DOM extracted with water in the forestland; Forest-O: DOM extracted with organic reagents in the forestland; Farm-W: DOM extracted with water in the farmland; Farm-O: DOM extracted with organic reagents in the farmland. The lower case letters in each column represent the significance of the difference at $p < 0.05$.

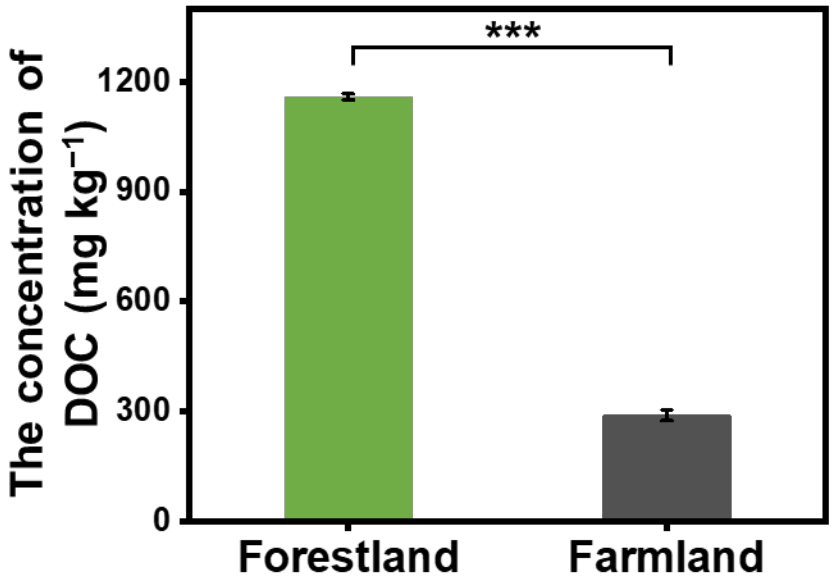

Fig. S3. The concentration of dissolved organic matter (DOC) in fumigated mollisol soils (***$p <$ 0.001).