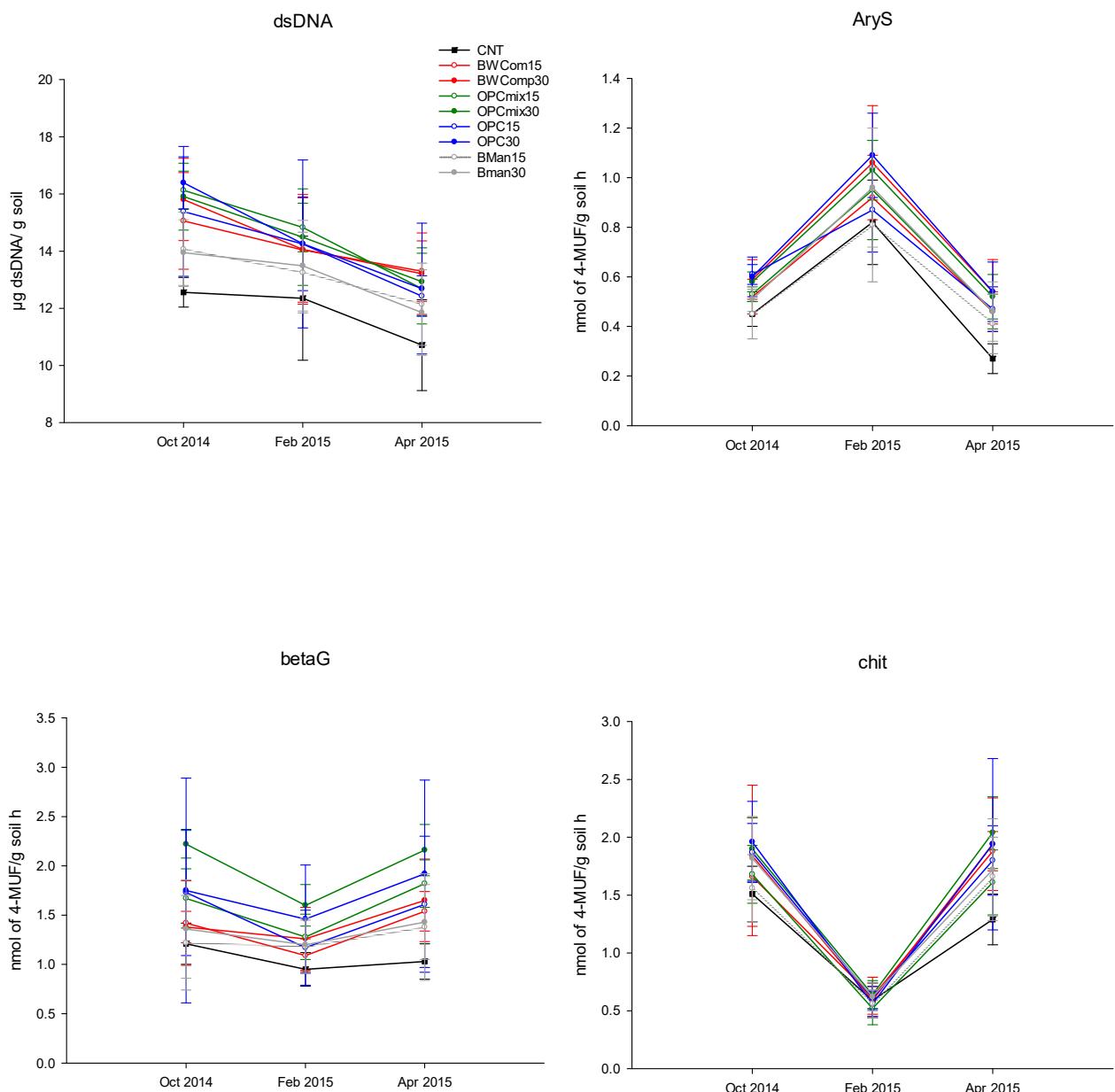


Figure S1 dsDNA and enzymatic activities (mean \pm s.d.), arylsulfatase (AryS), β -glucosidase (betaG), chitinase (chit), leucine aminopeptidase (leu), acid- and alkaline-phosphomonoesterase (acP and alkP), phosphodiesterase (bisP), pyrophosphate-phosphodiesterase (piroP) and phytase (inositP) showed as temporal dynamics in CNT = Control, BWcom15 and BWcom30 = biowaste compost 15 Mg ha^{-1} and 30 Mg ha^{-1} , OPCmix15 and OPCmix30 = mixed olive pomace compost 15 Mg ha^{-1} and 30 Mg ha^{-1} , OPC15 and OPC30 = Olive pomace compost 15 Mg ha^{-1} and 30 Mg ha^{-1} , BMan15 and BMan30 = buffalo manure 15 Mg ha^{-1} and 30 Mg ha^{-1} treatments.



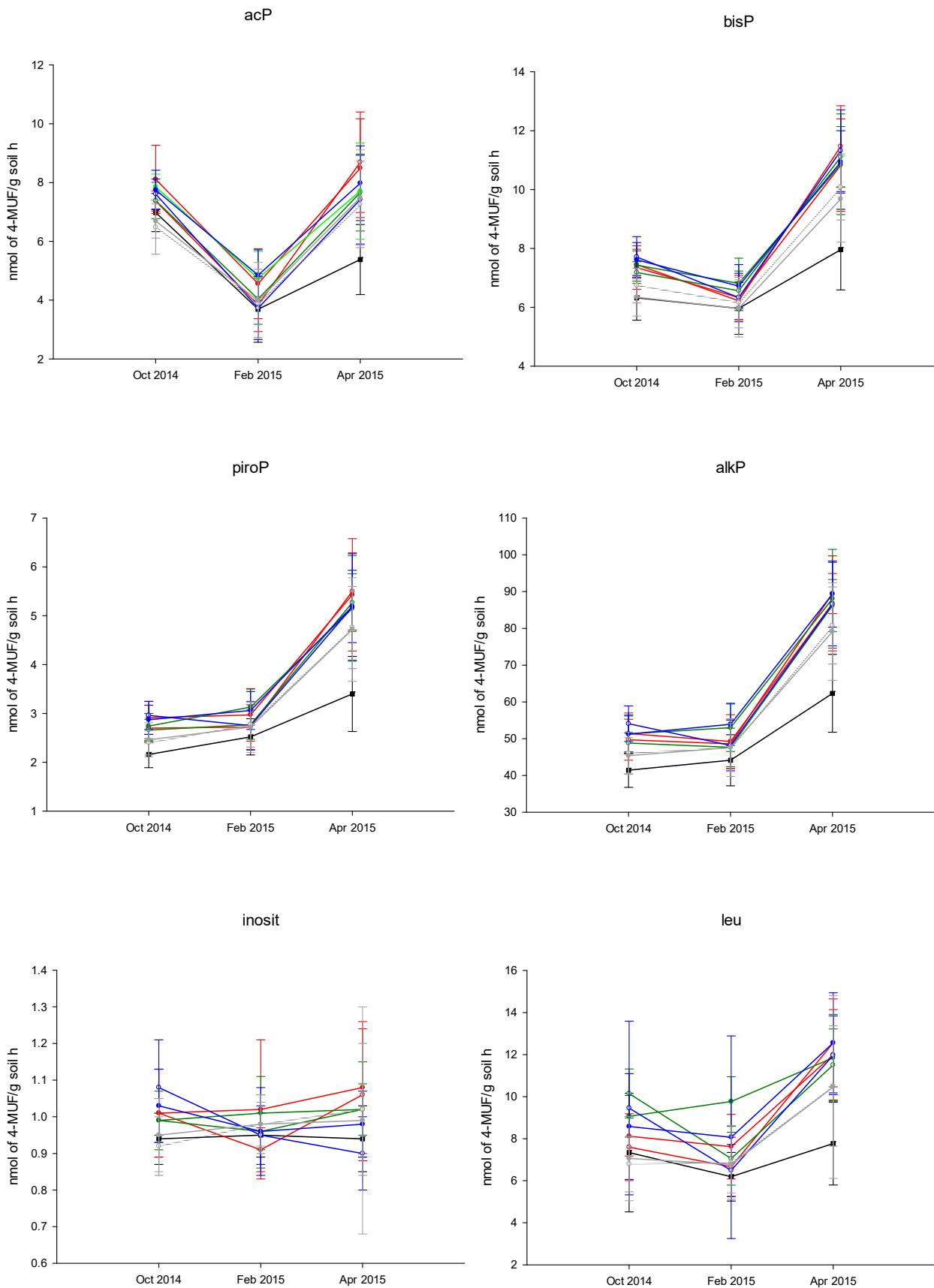


Table S1 Sum of Square, F model and P adjusted values of Pairwise tests. Asterisks indicate significant differences (** P < 0.001, ** P < 0.01, * P < 0.05).

Pairs	Sum of square	F model	Significance
October 2014			
Cnt vs BWcom15	0.007	9.57	*
Cnt vs BWcom30	0.010	13.85	*
Cnt vs BMan30	0.005	9.35	*
Cnt vs BMan15	0.004	6.84	*
Cnt vs OPCmix15	0.008	10.73	*
Cnt vs OPCmix30	0.013	18.42	*
Cnt vs OPC30	0.014	17.51	*
Cnt vs OPC15	0.014	20.78	*
BWcom30 vs BMan30	0.009	12.21	*
BWcom30 vs BMan15	0.008	10.01	*
BMan30 vs OPCmix15	0.006	9.45	*
BMan30 vs OPCmix30	0.007	10.64	*
BMan30 vs OPC30	0.012	16.67	*
BMan30 vs OPC15	0.010	17.49	*
BMan15 vs OPCmix15	0.006	7.91	*
BMan15 vs OPCmix30	0.007	10.38	*
BMan15 vs OPC30	0.010	14.95	*
BMan15 vs OPC15	0.010	14.95	*
April 2015			
Cnt vs BWcom15	0.08	55.99	*
Cnt vs BWcom30	0.08	49.42	*
Cnt vs BMan15	0.04	25.13	*
Cnt vs OPCmix15	0.07	48.16	*
Cnt vs OPCmix30	0.07	54.55	*
Cnt vs OPC30	0.08	52.91	*
Cnt vs OPC15	0.05	30.97	*

Table S2 Result of RM-ANOVA on biological parameters for “Sampling time” and the combination “Organic amendment x Dose”. Different letters indicate significant differences ($\alpha = 0.05$) among the treatments in each sampling time.

October 2014											
Treatments	dsDNA	AryS	betaG	chit	acP	bisP	piroP	alkP	inosit	leu	
CNT	d	c	c	b	abc	b	c	c	b	ab	
BMan15	bcd	bc	c	ab	c	ab	bc	bc	b	b	
BMan30	cd	abc	bc	ab	bc	b	abc	bc	ab	b	
BWCom15	abc	abc	bc	ab	abc	a	ab	ab	ab	ab	
BWCom30	abc	a	bc	ab	a	ab	ab	ab	ab	ab	
OPC15	abc	a	ab	ab	abc	a	a	a	a	ab	
OPC30	a	a	ab	a	abc	a	ab	ab	ab	ab	
OPCmix15	a	abc	abc	ab	abc	ab	abc	ab	ab	a	
OPCmix30	ab	ab	a	ab	ab	a	ab	ab	ab	ab	
February 2015											
Treatments	dsDNA	AryS	betaG	chit	acP	bisP	piroP	alkP	inosit	leu	
CNT	b	cd	c	a	a	a	b	b	a	b	
BMan15	ab	d	abc	a	a	a	ab	ab	a	b	
BMan30	ab	abcd	abc	a	a	a	ab	ab	a	b	
BWCom15	ab	abcd	bc	a	a	a	ab	ab	a	b	
BWCom30	ab	ab	abc	a	a	a	ab	ab	a	ab	
OPC15	ab	bcd	abc	a	a	a	ab	ab	a	b	
OPC30	ab	a	ab	a	a	a	ab	a	a	ab	
OPCmix15	a	abcd	abc	a	a	a	ab	ab	a	ab	
OPCmix30	a	abc	a	a	a	a	a	a	a	a	
April 2015											
Treatments	dsDNA	AryS	betaG	chit	acP	bisP	piroP	alkP	inosit	leu	
CNT	b	c	c	b	c	d	b	a	ab	b	
BMan15	ab	b	bc	a	b	bc	a	a	ab	ab	
BMan30	ab	ab	b	a	ab	c	a	a	ab	ab	

BWCom15	a	ab	ab	a	a	a	a	a	a	a
BWCom30	a	a	ab	a	ab	abc	a	a	a	a
OPC15	ab	ab	ab	a	ab	ab	a	a	b	a
OPC30	a	a	ab	a	ab	abc	a	a	ab	a
OPCmix15	a	ab	ab	ab	ab	ab	a	a	ab	a
OPCmix30	a	ab	a	a	ab	abc	a	a	ab	a

Legend: dsDNA = Double strand DNA, AryS = arylsulfatase activity, betaG = β -glucosidase activity, chit = chitinase activity, acP and alkP = acid- and alkaline-phosphomonoesterase, bisP = phosphodiesterase activity, piroP = pyrophosphate-phosphodiesterase, inosit = phytase activity, leu = leucine aminopeptidase activity. CNT = Control, BWcom15 and BWcom30 = biowaste compost 15 Mg ha-1 and 30 Mg ha-1, OPCmix15 and OPCmix30 = mixed olive pomace compost 15 Mg ha-1 and 30 Mg ha-1, OPC15 and OPC30 = Olive pomace compost 15 Mg ha-1 and 30 Mg ha-1, BMan15 and BMan30 = buffalo manure 15 Mg ha-1 and 30 Mg ha-1.