



Supplementary Table Soil total nitrogen and available nitrogen contents in the each treatment at soil depths of 0-20cm before the start of the experiment of 2018–2019.

	Total Nitrogen (g/kg)		Available Nitrogen (mg/kg)	
	MW	IW	MW	IW
N0	1.1 Bc	1.14 ABc	85.87 Bb	92.21 Ab
N1	1.16 Bb	1.22 Ab	89.13 Bab	95.67 Aab
N2	1.22 Aa	1.25 Ab	93.95 Aa	98.93 Aa
N3	1.27 Aa	1.28 Aa	94.00 Ba	98.47 Aa
Average	1.19 A	1.22 A	90.74 B	96.32 A

MW, mono-cropped wheat; IW, intercropping wheat. Values with different lower case letters are significantly different among N levels, and values with different capital letters are significantly different between planting pattern under the same N level (two-way ANOVA, $p < 0.05$).