

Table 2: Statistically significant relationships ( $p < 0.05$ ) represented by maximal information coefficient (MIC) and measure of the non-linearity of the relationship (MIC-R<sup>2</sup>) values between annual background nitrous oxide emissions (BNE) and environmental parameters for the cereal, rice and vegetable crops. MIC captures relationship strength, and the higher MIC-R<sup>2</sup> is, the more non-linear the relationship is. N is the number of studies.

Parameters	Cereal			Rice			Vegetable		
	MIC	MIC-R <sup>2</sup>	N	MIC	MIC-R <sup>2</sup>	N	MIC	MIC-R <sup>2</sup>	N
Air temperature	0.48	0.37	167						
pH	0.37	0.19	195				0.50	-0.39	59
BD	0.33	0.30	176	0.40	0.37	68	0.50	0.34	56
Silt content	0.42	0.26	115						
Sand content	0.39	0.38	116						
Clay content	0.30	0.19	176						
Soil C	0.32	0.07	192	0.40	0.23	81			
Soil N	0.38	0.18	161						
Previous N fertilizer	0.31	0.29	163				0.59	0.51	54
Crop yield	0.47	0.31	94				0.59	0.18	19
Study length	0.61	0.58	197	0.39	-0.02	78			
Chamber size	0.34	0.10	152				0.50	-0.39	43