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Table S1. Optimum distributions of the nine farming practices over the 8072 cabbage fields to achieve the three scenario goals under Representative Concentration Pathways 8.5 for the 2020s and 2090s.

Scenario Goal ^a		Count of Farming Practice								
		T1F1	T1F2	T1F3	T2F1	T2F2	T2F3	T3F1	T3F2	T3F3
Minimizing GHGs	2020s	6069 (75%) ^b	-	-	1745 (22%)	-	-	258 (3%)	-	-
	2090s	7614 (94%)	-	-	458 (6%)	-	-	-	-	-
Maximizing Yield	2020s	-	-	2325 (29%)	-	-	578 (7%)	-	-	5169 (64%)
	2090s	-	-	217 (3%)	-	-	4184 (52%)	-	-	3671 (45%)
Maintaining Demand	2020s	215 (3%)	398 (5%)	4165 (52%)	271 (3%)	99 (1%)	646 (8%)	282 (3%)	207 (3%)	1789 (22%)
	2090s	4628 (57%)	269 (3%)	481 (6%)	522 (6%)	145 (2%)	157 (2%)	1350 (17%)	153 (2%)	367 (5%)

^a Scenario goals were achieved by allocating the farming practices into the 8072 Korean cabbage field cells of for a particular time period. Minimizing GHGs = farming practices to achieve minimum GHG emissions. Maximizing yield = farming practices to achieve maximum cabbage yield. Maintaining demand = farming practices to balance future cabbage yield with future demand for a particular time period.

^b Number in parentheses indicates the percentage (%) of each farming practice. Tillage depths, T1, T2, and T3 denote 10, 20, and 30 cm, respectively. Fertilizer levels F1, F2, and F3 denote 100, 200, and 400 kg N ha⁻¹, respectively.

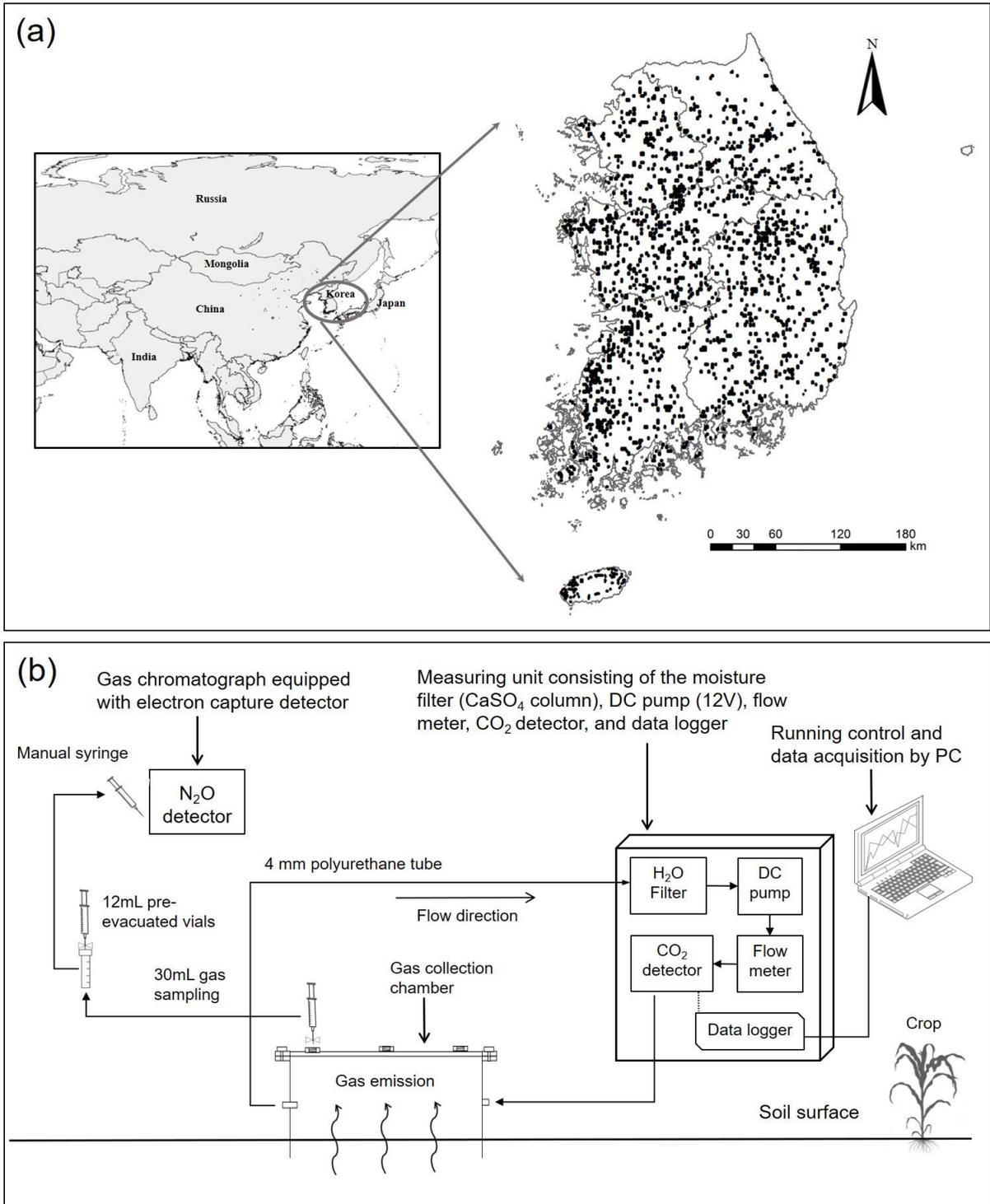


Figure S1.

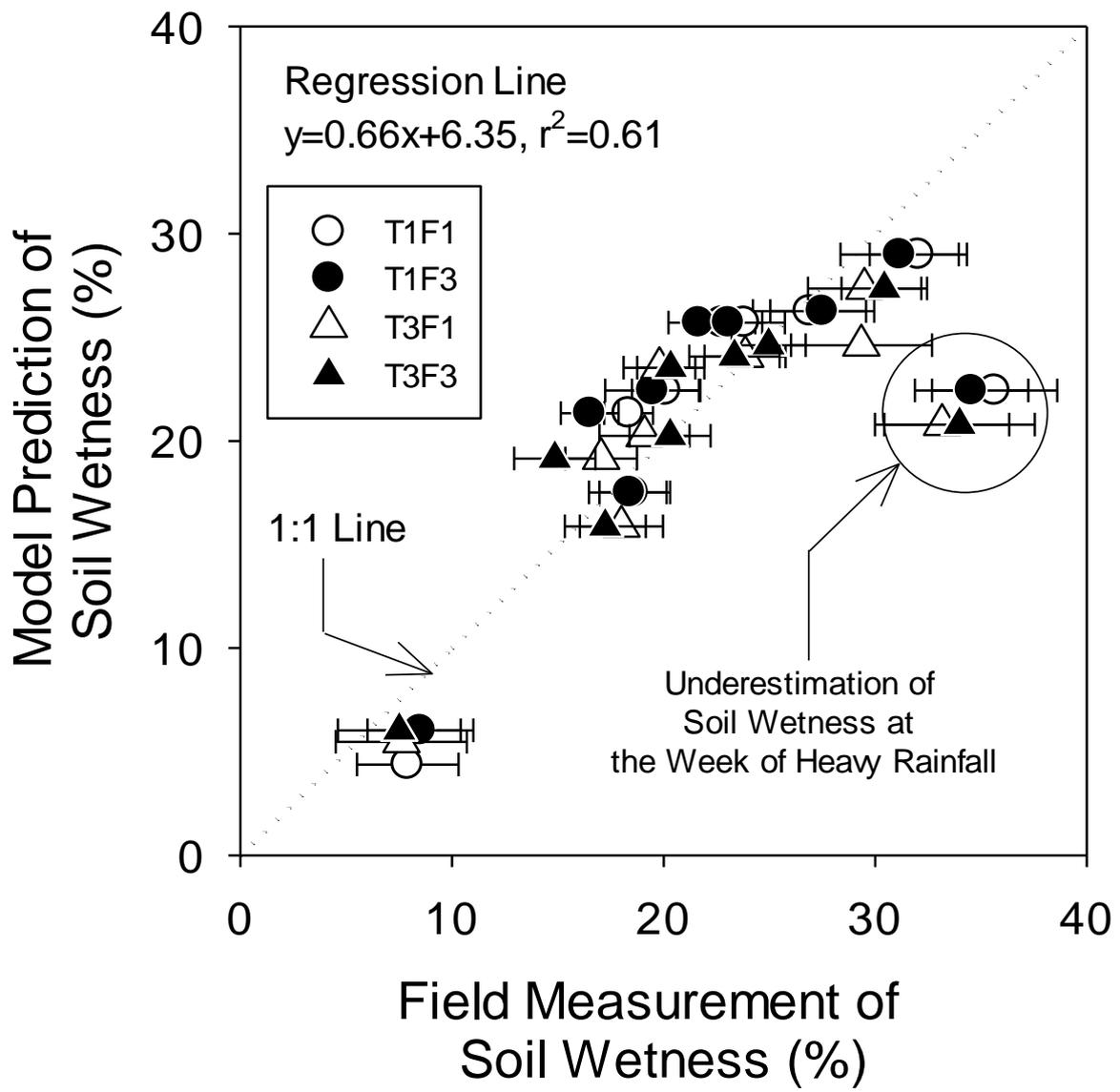


Figure S2.