Table 2. Summary of soil quality analysis sampling procedures, schedules, and methods.

Soil Quality Parameter	Soil Sampling Procedure	Sampling Schedule	Analysis Method	Reference
Soil temperature	One iButton/plot	Continuous throughout fall and growing season	iButton datalogger	
Soil moisture	One probe/plot	"	Soil moisture sensor	
PHYSICAL				
Aggregate stability	Composite of 5 soil cores (depth=15 cm) per plot	Before seaweed application (Oct 11); before sweet corn seeding (May 12); at sweet corn harvest (Sept 12)	Wet sieving for determination of water stable aggregates	Angers and Mehuys, 1993
Available water capacity	Two 15 cm cores per plot	"	Water content at field capacity	USDA ARS, 1999
Infiltration	One ring/plot	"	Flooded/ponded infiltrometer method	"
Bulk density	Three samples/plot	"	Dry weight per unit volume	"
BIOLOGICAL				
Organic matter content	Composite of 5 soil cores (depth=15 cm) per plot	Before and after seaweed application, monthly through growing season	Loss on ignition at 550°C	Gugino *et al.*, 2009
Active carbon	"	"	$KMnO_4$ oxidation, colorimetric determination	"
Potentially mineralizable nitrogen	"	"	Comparison of extractable NH_4 before and after 7 d incubation	"
Soil respiration	In-field test (1/plot)	"	Closed chamber CO_2 evolution	Richardson, 2006
Earthworm abundance	30 x 30 x 30 (width x length x depth) sample (1/plot)	Before seaweed application (Oct 11); before sweet corn seeding (May 12); at sweet corn harvest (Sept 12)	Counting	USDA ARS, 1999
CHEMICAL				
Nitrate, ammonium	Composite of 5 soil cores (depth=15 cm) per plot	"	KCl extraction, microplate colorimetric analysis	Gugino *et al.*, 2009

Phosphate	"	"	Sodium bicarbonate extraction, microplate colorimetric analysis	Schoeneu and Karamanos, 1993
Extractable K and Ca	"	"	Morgan's Solution extraction, ICP analysis	Gugino *et al.*, 2009
Total K, Ca, Mg, Fe, Al, Mn, Zn, Cu, S	"	"	X-Ray Fluorescence	Dos Anjos *et al.*, 2000
Sulfate	"	"	XRF, calcium chloride extract and spectrophotometric analysis	Kowalenko, 1993
Total heavy metals (Pb, Cd, Ni, Cr)	"	Before seaweed application (Oct 11); before sweet corn seeding (May 12); at sweet corn harvest (Sept 12)	XRF	Dos Anjos *et al.*, 2000
Salinity (electrical conductivity)	"	Before and after seaweed application, monthly through growing season	EC meter, 1:2 soil:water	
pH	"	"	pH meter, 1:1 soil:water	