



SDI Review Form 1.6

Journal Name:	International Journal of Plant & Soil Science
Manuscript Number:	Ms_IJPSS_25339
Title of the Manuscript:	Dynamics of Soil Carbon, Nitrogen and Soil Respiration in Famer's Field with Conservation Agriculture, Siem Reap, Cambodia
Type of the Article	Original Research Article

General guideline for Peer Review process:

This journal's peer review policy states that **NO** manuscript should be rejected only on the basis of '**lack of Novelty**', provided the manuscript is scientifically robust and technically sound.

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PART 1: Review Comments

	Reviewer's comment	Author's comment (if agreed with reviewer, correct the manuscript and highlight that part in the manuscript. It is mandatory that authors should write his/her feedback here)
Compulsory REVISION comments	Line 26: It has been 37 claimed that components of CA promote soil health, productive capacity, and ecosystem services REVIEWER: Use 'Conservation Agriculture' here as well as CA. Even though it is defined in the Abstract, it should also be added here. Line 67: No-till 68 system may promote N2O emissions. REVIEWER: Add reference The introduction is too long. You don't need so much detail on CA. REVIEWER: Please change accordingly Line 91 The geographic location of the study sites is shown in Figure 1. Briefly, the 15 study sites 92 were located in three villages in Siem Reap Cambodia: O'Village (13°19'22.9"N; 93 103°56'50.62"E); Sratkat village (13°20'55.57"N; 104°02'45.11" E); and Soutrikum Village 94 (13°16'48.66"N; 104°07'47.85"E). REVIEWER: You should eliminate the table from Figure 1 because it repeats the information provided here. REVIEWER: Line 101 to 105. I don't understand why this is important.	



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	Line 106 :In CA, tillage was no longer repeated after the first crop production, dry rice straws 107 (<i>Oryza sativa</i> L.) of about 15 Mg ha⁻¹ were placed on top of the vegetable beds' surface as mulch 108 (8 cm height). A cover crop <i>Crotolaria juncea</i> L. was planted at 0.5 m apart at a rate of 30 kg ha⁻¹ 109 1 between rows of crops. One week prior to harvesting the main crop, <i>Crotolaria juncea</i>, was 110 then cut from the base of the stem, laid on top of the soil, and covered with rice mulch with the 111 same rate as above. Holes were dug at about 10 cm in diameter and by 10–12 cm depth for 112 planting the next crop. In CT, the soil was continuously tilled at about 20 cm depth, using hoe 113 and moldboard plow drafted by two buffalos. The soils were then evened out using rakes, beds 114 remade, remaining residues taken out and sometimes burned, and holes manually dug for the 115 next crop (Figure 3). REVIEWER: Start this paragraph by talking about CT. Describe it in detail. Then talk about CA, and how it differs. REVIEWER: In section 2.2, it is not possible to understand how the plots were laid out in relation to the treatments. As a result, the statistical results cannot be evaluated properly. How were the plots laid out (randomly?) and were there subplots? Line 118, for example reads: Each plot measuring 100 m² was replicated five times. Then, line 123 reads: Within each farm, CA and 124 CT experimental units covering an area of about 25 m² were sampled diagonally in two depths; 125 surface (0-10 cm) and bottom (10-20 cm) layers. Five subsamples were taken...	
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	Line 125: Five subsamples were taken, REVIEWER: How and with what? Line 148: Soil respiration was measured 12 times REVIEWER: When during the day? Line 201: It is generally recognized 202 that the differential effects of crop rotations on SOC are simply related to the amount of above 203 and belowground biomass produced and retained in the system. REVIEWER: Isn't this obvious. How else would SOC increase? REVIEWER: Lines 208-230. This paragraph adds nothing to the discussion and should be deleted. Or you need to incorporate this REVIEWER: Add sample sizes to all tables.	
<u>Minor</u> REVISION comments	The authors should engage a fluent English-language speaker to read and edit the manuscript. There are numerous grammatical and spellings errors throughout the manuscript.	
<u>Optional/General</u> comments		

Reviewer Details:

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