



SDI Review Form 1.6

Journal Name:	International Journal of TROPICAL DISEASE & Health
Manuscript Number:	2013_IJTDH_7352
Title of the Manuscript:	Shiga toxin- and non-Shiga toxin-producing Escherichia coli O157 from cattle, goats and chicken in Ado-Ekiti, South west, Nigeria
Type of the Article	Research manuscript

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.

To know the complete guideline for Peer Review process, reviewers are requested to visit this link:

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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)
<u>Compulsory</u> REVISION comments	I do not agree on the conclusions, only one strain was found to carry STX, a non-O157 strain (it is not said what serotype). STEC stands for Shiga-like toxin carrying <i>E. coli</i>, and thus, only one strain was an STEC. This should be adapted. The discussion should be adapted also appropriately. Moreover, since only 12 strains were tested by PCR, the authors cannot make a full conclusion. All 21 O157 and 15 “non-O157” should be tested before a firm conclusion can be made. Throughout the manuscript, and especially in the discussion, STEC can only be used for the one strain carrying STX1 A weak point in the methodology is that it is a rather uncommon way of isolating STEC. Several methods have been described and their sensitivity and specificity is known. This should be elaborated in the discussion and an estimate of the sensitivity and specificity of the used method should be given. This is certainly necessary seen the low overall isolation of <i>E. coli</i>. It is however unclear how strains were selected. It is to be expected that nearly all samples contain <i>E.</i>	It could also be assumed that some of the organisms may have been killed by heat



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	<i>coli</i>, though only 316 of the 722 samples contained <i>E. coli</i>. This indicates that the isolation procedure was not optimal. It is unclear how many strains were tested in the tissue culture test (add). Also it should be mentioned on what basis the 12 strains for PCR were selected. Moreover, in the abstract it is mentioned that 13 strains were tested. Adapt and include the correct number. In the discussion you mention that you detected <i>stx1</i> in several strains, however, in the results and abstract you mention only one non O157. What is the correct number? Adapt the manuscript appropriately. I do not agree with your conclusion, and it should be adapted. Only one STEC has been found and it was a non-O157 strain.	because some vendors leave the food, depending on type, on the fire and until totally vended. On the other hand, we accept that the use of SMAC may not have been sensitive and selective enough. We note this in our future studies. We did not say that 13 strains were tested; rather we said “13 serologically confirmed strains of O157” in line 24, please. Correction has been effected This has been adapted.
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Minor REVISION comments	The authors are seemingly surprised that only half of the sorbitol negative strains were O157: however on lie 191. This is however not surprisingly so omit however on line 191. I must say that I am surprised that there are so many, seen the isolation procedure. Lines 190-194 and the following paragraph contain many duplicates. Omit the serotyping from the lines 190-194 (lines 191-194) or merge the two paragraphs. The paragraph on serotyping should also contain the results of the other serotypes (which ones have been found). What were the results, 15 strains reacted with one of the antisera. In the discussion, the authors elaborate on the prevalence of O157, though they omit to acknowledge the fact that in most studies, the strains were also tested by PCR and found positive for one or more virulence genes. The low incidence of human infection may be due to the fact that the strains did not carry the virulence genes. On line 470 you refer to Blanco et al. that more than 470 serotypes have been reported, however you should mention that these are O:H combinations and you did not test for the H antigen. You should include that. Your study is the first to report 1 strain of non-	The two paragraphs have been merged as suggested. The commercial serotyping kit used screens for the 6 common non O157 serotypes as a group. Individual serotyping for O157 was not carried out. The strains could be any of the six serotypes listed in the manuscript, please. However, we note this in our future investigations. This is absolutely correct. But we said this on line 290-292 marked red This has been effected, please
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	O157 STEC, not plural. You should adapt that on lie 263. Line 73: wrong wording: O157 has not caused 2/3 of the human infections but 2/3 of the STEC infections in humans Line 100: change overcooked in well done (overcooked means it is not good anymore)	This has been corrected. This has been adapted Agreed; correction has been effected
<u>Optional/General</u> comments	This manuscript deals with the prevalence of STEC in animals in South-west Nigeria. <i>E.coli</i> was isolated non-selectively. These colonies were further selected for their growth on SMAC for sorbitol fermentation. Sorbitol negative isolates were further tested by latex agglutination for O157 and some other serotypes associated with STEC characteristics. Cytotoxicity was confirmed on vero cells and toxins and eae were determined by PCR on 12 selected strains. Paragraph 286: Here is mentioned that the stx1 carrying strain came from a goat (or were there more detected? The discussion on biofilms is not relevant since you did not test for it.	We have effected corrections appropriately