



SDI Review Form 1.6

Journal Name:	Journal of Experimental Agriculture International
Manuscript Number:	Ms_JEAI_41471
Title of the Manuscript:	DESIGNING RIPARIAN STRIPS AS A FUNCTION OF SEDIMENT YIELD IN THE BRAZILIAN SEMIARID
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. 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)						
Compulsory REVISION comments	Give a justification on why you think that equations proposed by authors in line 127 and 128 are the most appropriate for designing the width of vegetation strips in riparian areas and especially in the current study area.	The Jacu River riparian strip width was determined using the equation proposed by [22]and [10], which is appropriate for designing the width of vegetation strips in riparian areas to protect streams from high sediment and attached nutrient loss from hillslopes in areas of intensive land use on sloping ground. We argued that the filter strip should be a dense ground vegetation cover. The strip should be of variable width designed for the incoming discharges and sediment loads. The equation, which depends on the slope area and annual soil loss, can be expressed as:						
Minor REVISION comments	Table 1: length of main channel is repeated with different values i.e. 2.66km and 1.85km. Why is this so? Table 1: area of the basin catchment is repeated at the beginning and at the end. Is this necessary? Equation at line 113 should precede the parameter description in lines 110 and 111. Table 5: please check and confirm the column units in parenthesis	There was a typo. Correct is: <table><tr><td>Length of main channel</td><td>2.66 km</td></tr><tr><td>Vector distance from the main channel</td><td>1.85 km</td></tr></table> Table 1: Exclude: <table><tr><td>Area</td><td>2.10 km²</td></tr></table> Equation at line 113 In line 116 and 117 Table 5: ok. Excuseme	Length of main channel	2.66 km	Vector distance from the main channel	1.85 km	Area	2.10 km ²
Length of main channel	2.66 km							
Vector distance from the main channel	1.85 km							
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Optional/General comments	Provide a brief explanation/discussion on how different vegetative materials will be effective Why go for the largest riparian strip width (15m) for the year 2008, yet it appears that the trend in sediment yield is a reduction (negative).	In table 5 in the year 2010 the watershed had a production of sediments (Y) of 0.152 t ha⁻¹ obeying a riparian strip width of 5.71 m. On the other hand in 2011 the production of sediments of the watershed was greater than the previous year obeying to a riparian strip width of 7.54 m. Considering the two banks of the river we will have riparian strip widths of 11.42 m. and 15.08 m. respectively. The riparian strip widths accompany sediment production in the watershed that inherited of variability, associated with the distribution pattern of precipitation and local runoff. The 4-year period is probably not enough to capture the entire range of variability of the semiarid region, requiring the observation of hydrological data and production of larger sediments in order to have more conclusive riparian strip value for the Jacu River. Karssies and Prosser (2001) presented widths of 26 m for all erosion rates in the range 40 t ha⁻¹.						