



SDI FINAL EVALUATION FORM 1.1

PART 1:

Journal Name:	American Journal of Experimental Agriculture
Manuscript Number:	2013_AJEA_7269
Title of the Manuscript:	Genetic control against Striga hermonthica infestation: use of host-plant tolerant maize

PART 2:

FINAL EVALUATOR'S comments on revised paper (if any)	Authors' response to final evaluator's comments
1. YES, PLEASE REFER TO PAPER FOR THE CORRECTIONS 2. THE REFERENCE HAVE NOT BEEN CORRECTED. THE AUTHOR(S) SHOULD LOOK AT THE PREVIOUS PUBLICATION IN THE ARCHIVES AND TAKE CORRECTION	The corrections are included in the text (see brown colour highlighted in yellow colour). Lines 2-3: The use of genetically host tolerant maize (<i>Zea mays</i> L.) in the control of <i>Striga hermonthica</i> in Northern Côte d'Ivoire We can't replace "tolerant" with "resistant" because the host plant maize used is tolerant not resistant to <i>Striga hermonthica</i>. Line 12: "Methodoloy": can't be removed as it is mandatory in the SDI_Paper_template_2012. Line 18: "Result": can't be "Result and discussion" (see SDI_Paper_template_2012) Line 22: Northern Sudan Savanna Line 24: "Host plant tolerance" the words fit well, not "The genetic development of" Lines 25-26: The genetic development of <i>Striga</i> tolerant maize can be done without developing tolerant varieties to a particular strain of the parasite. Line 34: the Line 35: varying Line 37: is economically Line 38: Northern Lines 43 and 52: A "trap crop" is a plant that attracts agricultural pests, away from nearby crops. A catch crop is a fast-growing crop that is grown simultaneously with, or between successive plantings of a main crop Lines 43-44: <i>Striga</i>-infested endemic regions in Northern Line 45: the political instability and military war. Lines 45-48: The crisis increased <i>Striga</i> infestations by suppressing seed-checkpoints at borders, and favouring the droppings of migratory animals from neighbouring Sahelian counties where <i>Striga</i> is a serious menace to cereal cultivation. The use of cotton as trap crops has also been abandoned. Line 49: Today, <i>Striga</i> infestation has become Line 51: hand pulling and hoe weeding Line 53: "genetic" resistance. The word in bold is correct (Badu-Apraku <i>et al.</i>, 2008) Line 55: resource-poor farmers Line 58: in maize plant Line 59: the <i>Striga</i> seeds Lines 62, 64, 68, 69, 90, 105-107, table 2, 208, 227, 272: genotype(s) variet(y)ies Lines 62, 64, 68, 69, 105-107 : "variety" has been used instead of using "genotype" Lines 69-70: and therefore shows few symptoms of infestation damage symptoms Lines 70-74: <i>Striga</i> on the susceptible variety usually penetrated the xylem and showed substantial internal haustorial development [15]. Enzymes play a major role on each of the five stages of <i>Striga</i> parasitic development, including <i>Striga</i> seed germination, haustorial initiation, penetration of host root tissues, physiological compatibility and parasitic growth and maturity [16]. Line 82: host Lines 85-87: <i>Striga</i> infestation has reached an endemic status in both the Sudan Savanna and the sub-Saharan Savanna of Côte d'Ivoire (Kouakou <i>et al.</i>, 2013, personal



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	communication). It represents a serious threat to maize production compelling farmers to abandon their farmlands. Lines 90-94: The results were discussed with regard to <i>Striga</i> virulence within <i>S. hermonthica</i> populations and their role in host-specificity of the parasite. Understanding the relationship between geographically separated populations and host-preference would improve the ability to successfully breed for broad and durable resistance to <i>Striga</i> species among the most common host crops [21]. Line 100: “P”= phosphorus Line 101: Rain falls Line 103: and. The Lines 104, 118, 119, 239, 241, 296, 298, 300, 301, table 4: Savanna Lines 113-114: have been deleted and included in “line 108”: white and medium maturing (100 days), and line 110 yellow-grained and early (95 days) Line 157: modified formula [23] Lines 169-170: similar to Haussmann <i>et al.</i> [25]: Line 188: genotypes “x” <i>S. hermonthica</i> = genotypes by <i>S. hermonthica</i> Line 192: the percentage included the tolerant (2736 kg/ha) and the susceptible (1806 kg/ha) varieties and is calculated as follows 51% = (2736-1806)*100/1806. Lines 193, 202, 225: The titles of the tables (1-3) have been detailed. Line 225: By splitting table3 in 5 tables (5 parameters), the total number of tables in the manuscript will be numerous: 9 tables. We think it is better to not split it. However the title has been detailed as you have suggested.
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