



SDI Review Form 1.6

Journal Name:	British Microbiology Research Journal
Manuscript Number:	Ms_BMRJ_20439
Title of the Manuscript:	Recent advances in virus-host coevolution and protective mechanisms against plant viruses
Type of the Article	Review 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:

(<http://www.sciencedomain.org/page.php?id=sdi-general-editorial-policy#Peer-Review-Guideline>)



SDI Review Form 1.6

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	The review has an extensive literature on the subject, but some topics are superficial. But this does not detract the work that made a good synthesis of the defense mechanisms of plants and virus attacks. However, the authors could have deepened better the theme of rhabdovirus passing through plasmodesmata. As in gene silencing could have described the loss of infectivity after mechanical inoculation of tospovirus. defense Also missed the defense mechanisms that exist for the viruses are not transmitted by mechanical inoculation and the viruses transmitted by vectors, insects, fungi etc..and also the inducing resistance by chemical substances or antiviral compounds.	Thank you for taking time to review our manuscript. All your indicated suggestions have been taken into consideration: - The theme of cell-to-cell transport through plasmodesmata was expanded as suggested by giving an example with rhabdovirus. - Also, we gave more details regarding the viral transmission of tospovirus that loss transmissibility in vectors and infectivity due to RNA sequence mutations. - We gave an example of defense mechanism of plant host against viruses transmitted by vectors: salicylic acid mediated resistance. - Salicylic acid is considered one of the effective chemical substances that induce resistance for some viral diseases.
<u>Minor</u> REVISION comments	As the tissue culture may favor the presence of endogenous sequences of Badnavirus? There are articles on this subject? Why the cross-protection can not sustain in time? Why it is not effective for all interactions host plant viruses?	We agree with these comments and made necessary clarifications. - We report the findings reported by Côte et al. 2010 about the activation of infectious endogenous sequences of Banana streak badnavirus (BSV) in tissue culture of banana (<i>Musa balbisiana</i>). - In the conclusion, we explained why classical breeding cannot sustain in



SDI Review Form 1.6

	How can co-evolve different species of viruses within the same cell? Are the same plant defense mechanisms for both viruses?	time; this is caused by the emergence of new plant pathogen races that overcome this type of resistance especially when single-gene is used. Also in trees, the cross protection is not durable due to the partial distribution of protective strain within the tree. - We sad in the article that there may be a variety of mechanisms that occur when two type of viruses infect a cell, limiting them to a small number (MOI), or even exclusion mechanisms that do not allow their co-existence in the same cell. - Defense mechanisms implicated in the superinfection exclusion can be mediated by viral proteins (such as p33) or by the induction of RNA silencing (see paragraph 5.)
<u>Optional/General</u> comments	The paper addresses a very important issue. Since infections caused by viruses have no chemical control becomes necessary to understand how does the host plants interaction with the virus. The different strategies addressed in this review draw up an overview of the co-evolution of the battle fought between plants and viruses. Over the years, researchers have reported different approaches to understand how plants defend themselves from virus attack. So the review should be published by is an important contribution and brings an updated bibliography of the essential results obtained by different researchers on the subject.	Thank you again for your pertinent comments.