Author's response to reviews

Title: Antimicrobial activities of endophytic fungi obtained from the arid zone invasive plant Opuntia dillenii and the isolation of equisetin, from endophytic Fusarium sp.

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Author's response to reviews: see over
Dear Editor,

Thank you for sending the referees comments of our manuscript. 

Herewith I am sending the amended manuscript with the suggested changes/comments.

The responses to referees comments are also listed below.

A few minor modifications were done to the title page to conform to the journal style.

Responses to referee comments: MS: 1891901123154539

Referee 3: Jaya Parkash Yadav

Comment 1- Reviewer should be referring to page 4 line 89 (there is no line 49 in page 4). A comma has been inserted into the text after natural products to bring out the meaning more clearly.

Comment 2- Page 7 line 150, the spelling mistake was corrected.

Comment 3- Table 1 settings were adjusted. Additionally the +Ve and -Ve control results also included with a footnote.

Comment 4- Suggested reference was added to the introduction.

Comment 5- During the sub culturing process to isolate the pure fungi careful observations were done to ensure that all different endophytes were located and isolated. We observed only eight distinct species. Accordingly the maximum number of distinct endophytic fungal species isolated was eight.

Referee 2: Jin Ao Duan

Comment 1- We searched thoroughly for previously reported endophytic fungi of *Opuntia dillenii* and found only one preliminary study report as we have mentioned in the manuscript. However, as already stated in our paper our study is the first to report the antimicrobial activities of endophytic fungi isolated from *O. dillenii*, an arid zone invasive plant. At the same time the secondary metabolites of endophytic fungi from arid zone *O. dilleni* have not been investigated before.
Comment 2-During the bioassay guided isolation process of the crude, all the fractions from the Sephadex LH20 were tested for antimicrobial activity. Fraction leading to equisetin was clearly the most active fraction. Two fractions that eluted early showed some weak antimicrobial activities. The TLC examinations of these fractions didn't show any well define spots and the examination of these two fractions by proton NMR indicated the absence of any interesting secondary metabolites (they indicated the presence of fatty acids which lack interest). Therefore these two weak antimicrobial fractions were not pursued further. Hence, equisetin is the only antimicrobial secondary metabolite of significance.

Referee 1-Muhammad Hamayun

We are unable to do any changes to the manuscript according to the comment of this reviewer as no specific suggestions or improvements are given.

In addition, two minor changes were done to the abstract(lines 40 and 46). Therefore the new version was uploaded.

Thanking you

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