**template for Peer Review comments**

**Technical series on synthetic biology**

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| **Comments on the Technical Series on Synthetic Biology** |
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| 33 | 22 | The first Insect Allies publication was not the Ellison et al. 2020 paper. It was most likely “Mei et al. 2019. Mei, Y., Beernink, B. M., Ellison, E. E., Konečná, E., Neelakandan, A. K., Voytas, D. F., Whitham, S. A. (2019) Protein expression and gene editing in monocots using foxtail mosaic virus vectors. Plant Direct. 3:e00181. doi: 10.1002/pld3.181”. Mei et al. 2019 investigates use of a virus for somatic protein expression and somatic gene editing in model plants and maize. |
| 33 | 19-32 | Tobacco rattle virus (TRV) is not insect transmitted (transmitted by nematodes). In the engineered TRV vector, the open reading frames required for nematode transmission are deleted. Potato virus X (PVX) is not known to be insect transmitted. |
| 33 | 25-32 | The Ariga et al. 2020 and the Ma et al. 2020 studies both required regeneration of infected plants through tissue culture in order to produce edits that were inherited. This is a very cumbersome and technically demanding process. |
| 33 | 25-32 | A more recent paper from a Spanish group uses PVX as a vector to deliver guide RNAs and produce *Nicotiana benthamiana* plants carrying heritable edits by two different methods. 1. They regenerate plant through tissue culture similar to Ariga et al. 2020 and Ma et al. 2020. 2. They directly induce heritable edits by delivering a single guide RNA fused to the FT sequence by a strategy similar to Ellison et al. 2020. Both methods still require the use of Cas9 expressing transgenic *Nicotiana benthamiana* lines in which to deliver the guide RNAs. The paper is: Uranga, M., Aragonés, V., Selma, S., Vázquez-Vilar, M., Orzáez, D. and Daròs, J.-A. (2021), Efficient Cas9 multiplex editing using unspaced sgRNA arrays engineering in a Potato virus X vector. Plant J, 106: 555-565. <https://doi.org/10.1111/tpj.15164>. |
| 33 | 31 | Arabidopsis is misspelled |
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|  |  | Additional rows can be added to this table by selecting “Table” followed by “insert” and “rows below” |

Please submit your comments to secretariat@cbd.int.