



Abstract # RTCM16_P_14_D2D

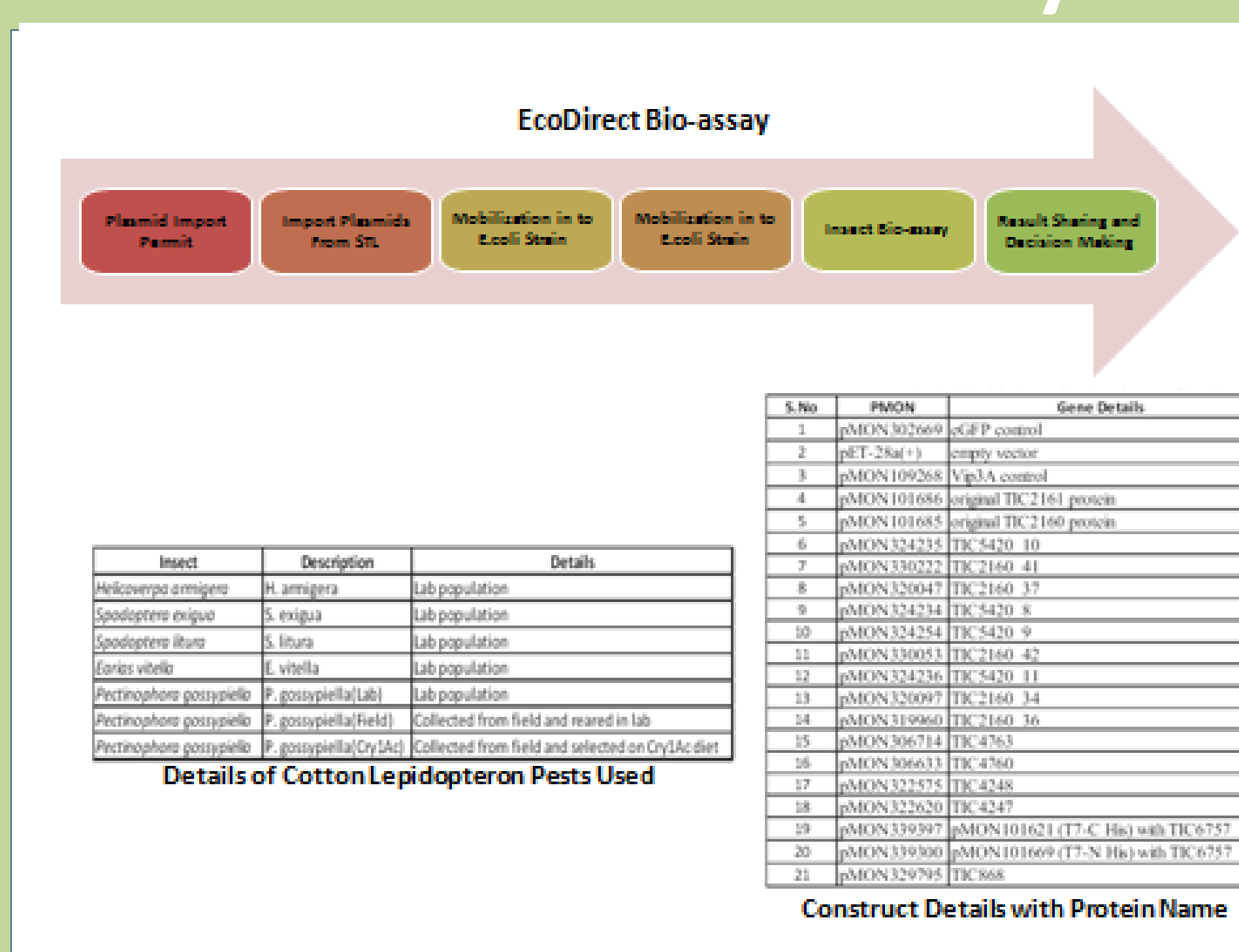
Screening of new Bt proteins against regional cotton lepidopteron pests in India using *E. coli* direct bioassay method

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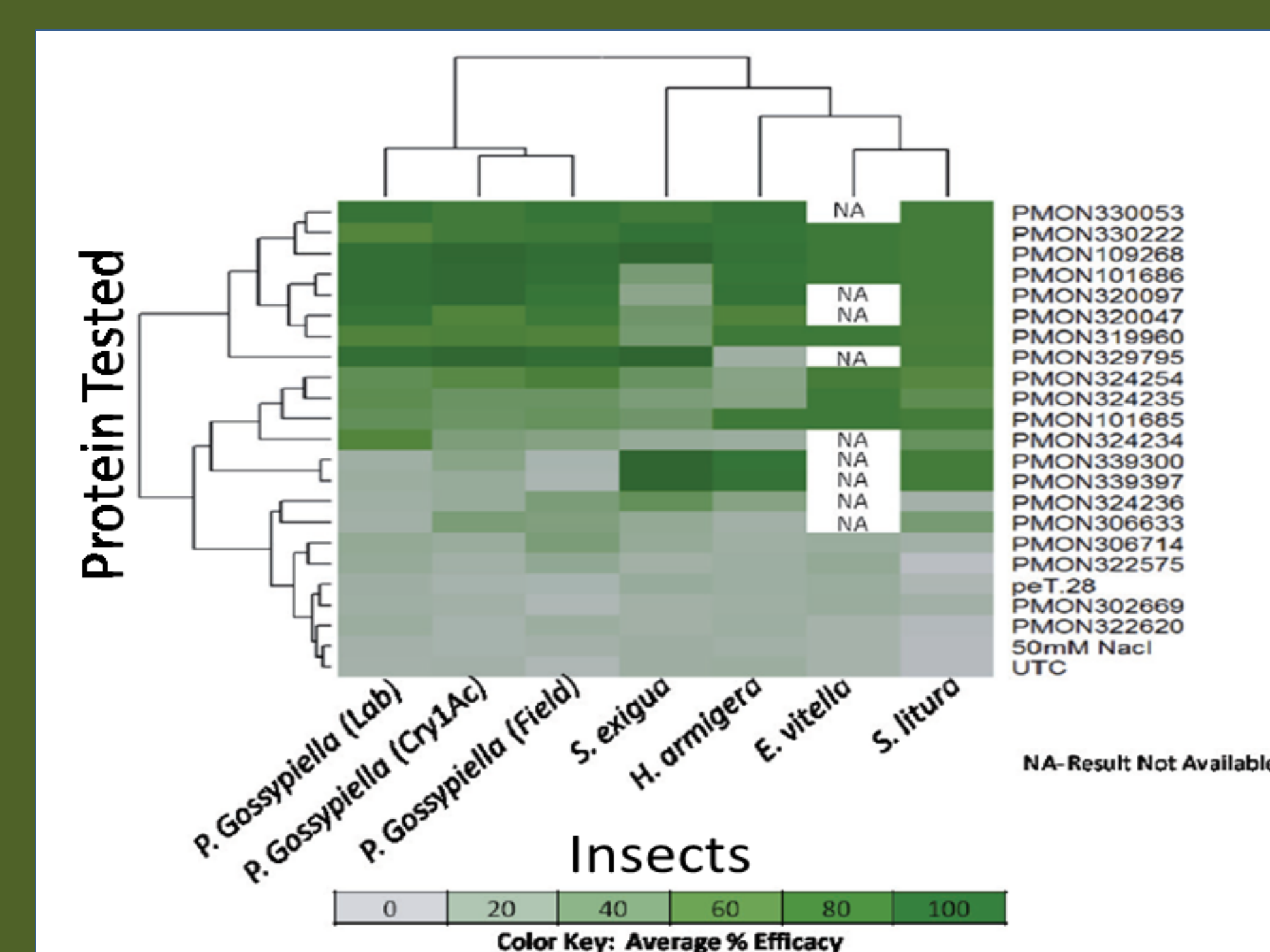
ABSTRACT

To speed up protein screening, we have adopted a strategy called "E.coli Direct Bioassay" wherein we express the protein in E.coli harboring the desired plasmid. The crude proteins were used for insect bio-assay. This approach should not only gain time but also result in early decision making. At MRC we received 21 plasmid constructs for bio-assay. Plasmids were mobilized in to E.coli, expressed and tested against Lepidopteron insect pests. These were scored for average percentage mortality and average percentage efficacy.

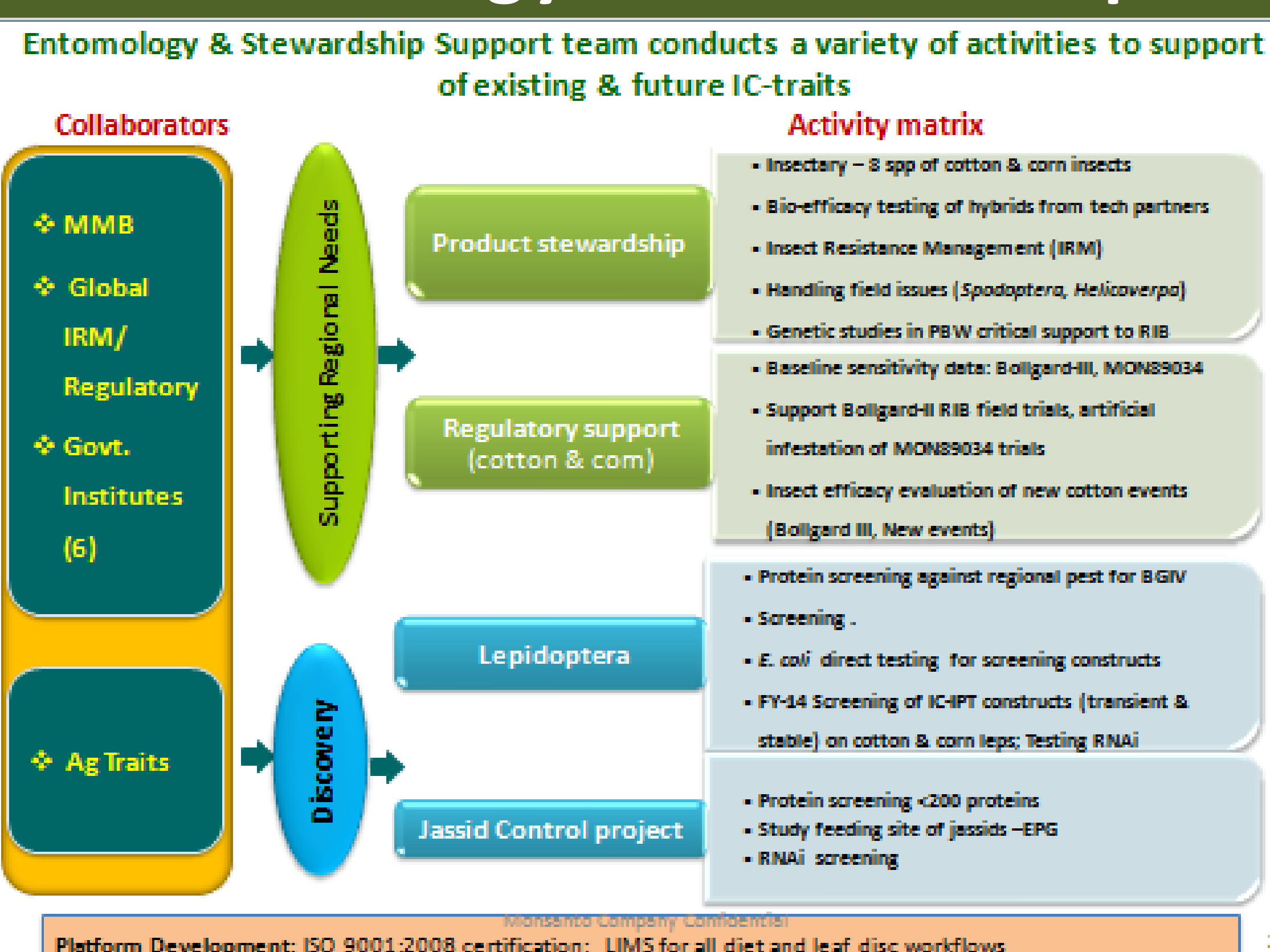
EcoDirect Bio-assay



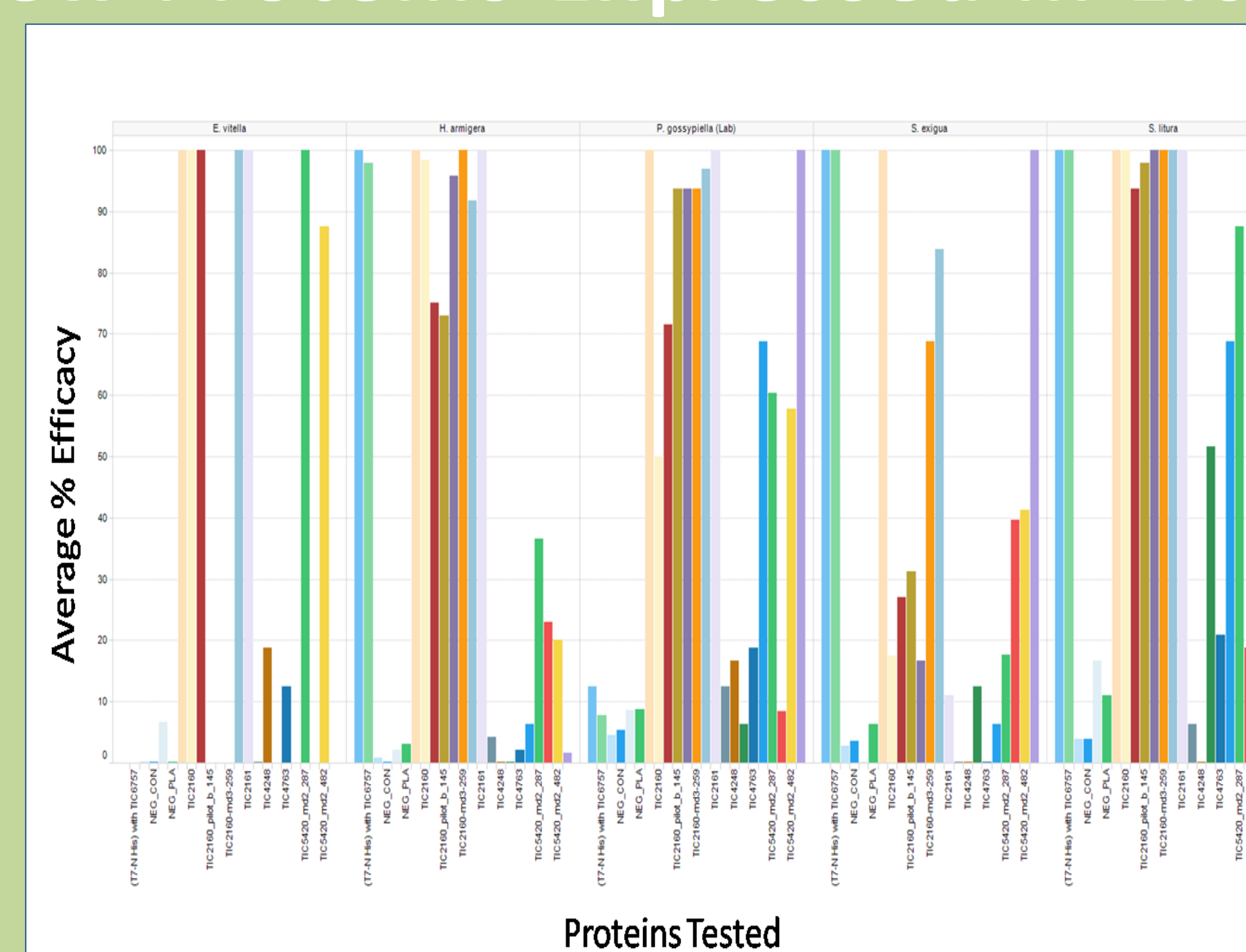
Proteins Tested



Entomology & Stewardship



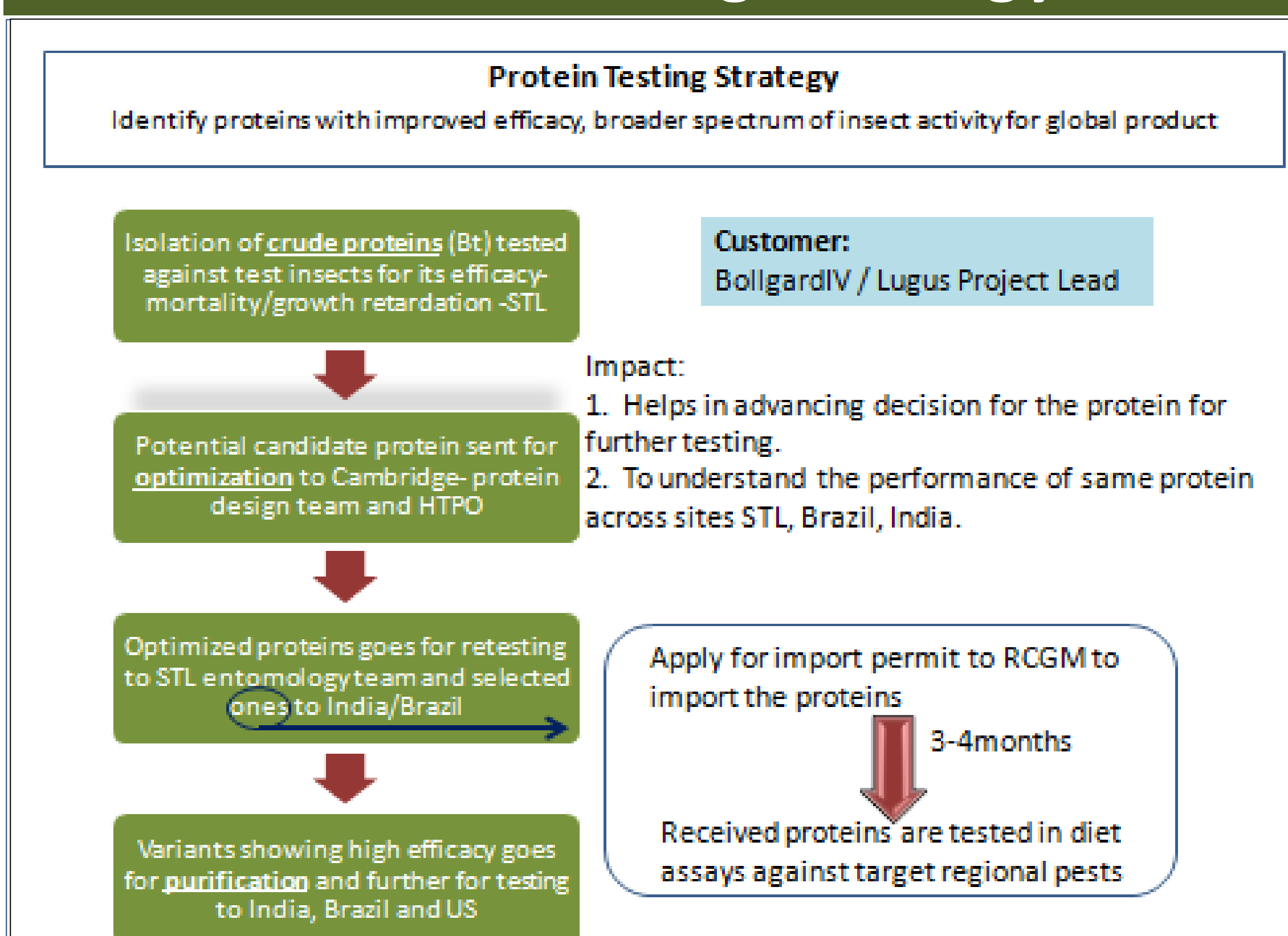
New Proteins Expressed in E.coli



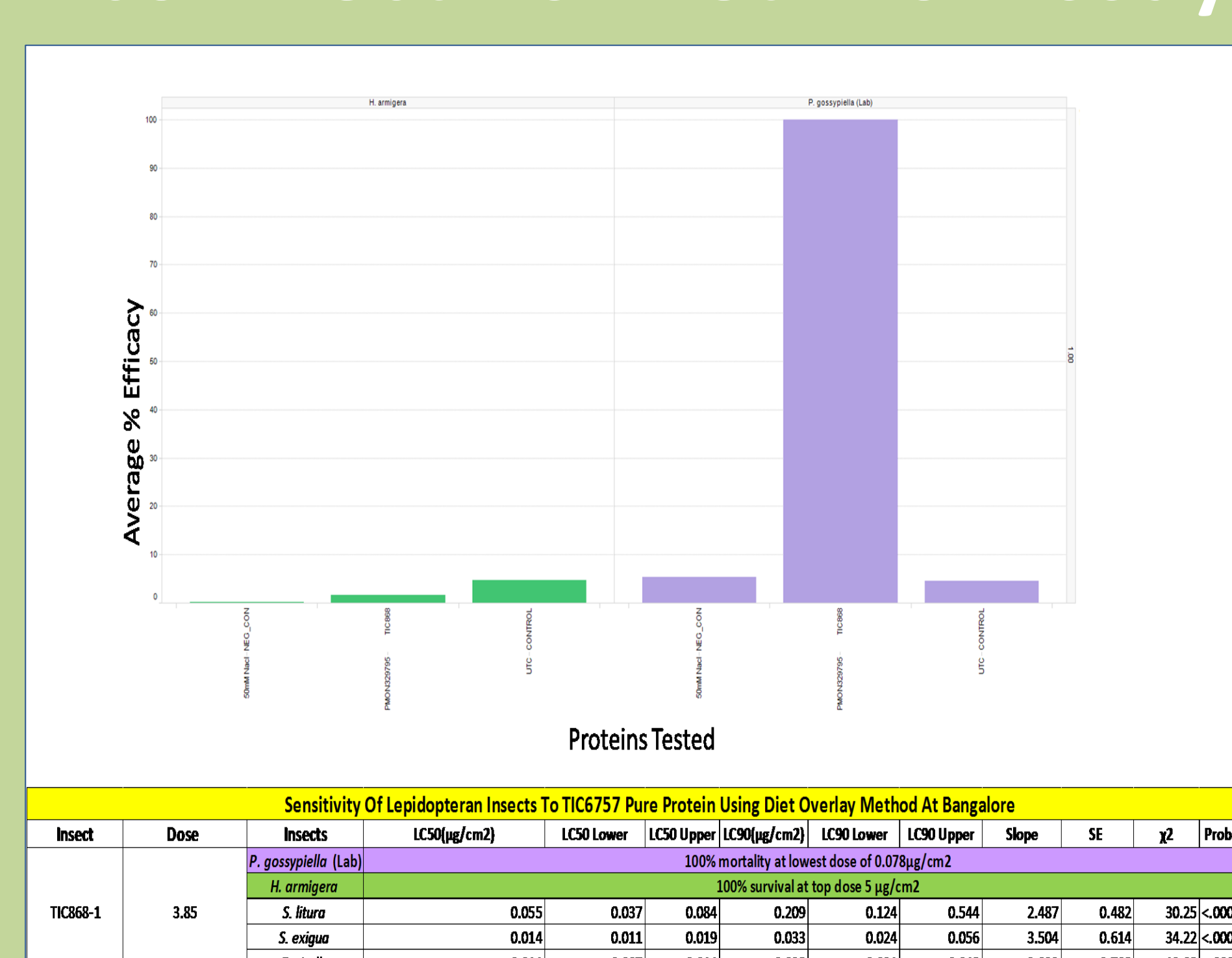
Data Security and Automation



Protein Testing Strategy



EcoDirect Vs Diet Bio-Assay



Acknowledgement: STL Protein Testing Team & BLR E.S.M.B.T Team

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