

The annotation of genomic dataset sequences of the sugar beet root maggot *Tetanops myopaeformis*, TmSBRM_v1.0

SUDHA ACHARYA¹, NADIM W. ALKHAROUF¹, CHENGGEN CHU², VINCENT P. KLINK³

¹Department of Computer and Information Sciences, Towson University, Towson, MD, 21252, USA. ²USDA-ARS-NA Northern Great Plains Research Laboratory, 1307N 18TH ST, Northern Crop Science Laboratory, Fargo, ND 58102, USA. ³USDA-ARS-NEA-BARC, Molecular Plant Pathology Laboratory, Building 004, Room 122, BARC-West, 10300 Baltimore Ave., Beltsville, MD 20705, USA.

CORRESPONDING AUTHOR(S): V. KLINK (Vincent.klink@USDA.gov)

DOI: <https://doi.org/10.1016/j.dib.2024.110710>

Abstract

Tetanops myopaeformis, the sugar beet root maggot (SBRM), is a devastating insect pathogen of sugar beet, one of only two plants in the world from which sugar is widely produced, accounting for 55% of U.S. sugar and 35% of global raw sugar with an annual farm value of \$3 billion in the United States. *T. myopaeformis* is capable of causing total crop failure, making its study important. The previously released SBRM genome, TmSBRM_v1.0, has been generated from the de novo assembled draft genome sequence of *T. myopaeformis* isolated that was isolated from field-grown *B. vulgaris* in North Dakota, USA. The annotation of the *T. myopaeformis* is presented here. The annotated *T. myopaeformis* genome should be useful in understanding the biology of this insect and the development of new control strategies for this pathogen, relationship to model genetic organisms like *Drosophila melanogaster* and aid in agronomic improvement of sugar beet for stakeholders while also providing information on the relationship between the SBRM and climate change.

RE-PRINT: Under a Creative Commons license

Author: Acharya et al.

Publication: Data in Brief

Publisher: Elsevier Inc

Copyright: ©2025 Elsevier B.V.

Date: 9 July 2024