

Contents

March 2020 • VOLUME 10 • ISSUE 3 • www.g3journal.org

GENOME REPORTS

- 877–880 **High-Quality Genome Assembly and Annotation of the Big-Eye Mandarin Fish (*Siniperca kneri*)**
Liang Lu, Jinliang Zhao, and Chenhong Li
- 881–890 **Whole Genome Sequencing and Comparative Genomics of Two Nematicidal *Bacillus* Strains Reveals a Wide Range of Possible Virulence Factors**
Nik Susič, Sandra Janežič, Maja Rupnik, and Barbara Gerič Stare
- 891–897 **Chromosome-Level Assembly of *Drosophila bifasciata* Reveals Important Karyotypic Transition of the X Chromosome**
Ryan Bracewell, Anita Tran, Kamalakar Chatla, and Doris Bachtrog
- 899–906 **Improved Genome Assembly and Annotation of the Soybean Aphid (*Aphis glycines* Matsumura)**
Thomas C. Mathers
- 907–915 **Genome Sequence of the Euryhaline Javafish Medaka, *Oryzias javanicus*: A Small Aquarium Fish Model for Studies on Adaptation to Salinity**
Yusuke Takehana, Margot Zahm, Cédric Cabau, Christophe Klopp, Céline Roques, Olivier Bouchez, Cécile Donnadieu, Celia Barrachina, Laurent Journot, Mari Kawaguchi, Shigeki Yasumasu, Satoshi Ansai, Kiyoshi Naruse, Koji Inoue, Chuya Shinzato, Manfred Scharl, Yann Guiguen, and Amaury Herpin

MUTANT SCREEN REPORT

- 917–923 **Mutational Analysis of N-Ethyl-N-Nitrosourea (ENU) in the Fission Yeast *Schizosaccharomyces pombe***
Rafael Hoyos-Manchado, Sergio Villa-Consuegra, Modesto Berraquero, Juan Jiménez, and Víctor A. Tallada

SOFTWARE AND DATA RESOURCES

- 925–932 **An Automated Method To Predict Mouse Gene and Protein Sequences Using Variant Data**
Peter Dornbos, Anooj A. Arkatkar, and John J. LaPres
- 933–943 **Interactively AUDIT Your Growth Curves with a Suite of R Packages**
Nicolas P. J. Coutin, Guri Giaever, and Corey Nislow
- 945–949 **CGSEA: A Flexible Tool for Evaluating the Associations of Chemicals with Complex Diseases**
Shiqiang Cheng, Mei Ma, Lu Zhang, Li Liu, Bolun Cheng, Xin Qi, Chujun Liang, Ping Li, Om Prakash Kafle, Yan Wen, and Feng Zhang

INVESTIGATIONS

- 951–965 **Genome-Wide Association Study in Two Cohorts from a Multi-generational Mouse Advanced Intercross Line Highlights the Difficulty of Replication Due to Study-Specific Heterogeneity**
Xinzhu Zhou, Celine L. St. Pierre, Natalia M. Gonzales, Jennifer Zou, Riyan Cheng, Apurva S. Chitre, Greta Sokoloff, and Abraham A. Palmer
- 967–983 **The *Drosophila* Post-mating Response: Gene Expression and Behavioral Changes Reveal Perdurance and Variation in Cross-Tissue Interactions**
Nicole R. Newell, Surjyendu Ray, Justin E. Dalton, Julia C. Fortier, Joyce Y. Kao, Peter L. Chang, Sergey V. Nuzhdin, and Michelle N. Arbeitman
- 985–997 **Red Light/Green Light, a Dual Fluorescent Protein Reporter System To Study Enhancer-Promoter Specificity in *Drosophila***
Eric M. Camino, Micheal L. Weinstein, Mary P. List, Jordan E. Vellky, Mark Rebeiz, and Thomas M. Williams
- 999–1004 **The *Drosophila melanogaster* Ortholog of RFWD3 Functions Independently of RAD51 During DNA Repair**
Juan Carvajal-Garcia, Evan R. Gales, Dale A. Ramsden, and Jeff Sekelsky
- 1005–1018 **Characterization of the Genetic Architecture Underlying Eye Size Variation Within *Drosophila melanogaster* and *Drosophila simulans***
Pedro Gaspar, Saad Arif, Lauren Sumner-Rooney, Maik Kittelmann, Andrew J. Bodey, David L. Stern, Maria D. S. Nunes, and Alistair P. McGregor
- 1019–1028 **Experimental DNA Demethylation Associates with Changes in Growth and Gene Expression of Oak Tree Seedlings**
Luke Browne, Alayna Mead, Courtney Horn, Kevin Chang, Zeynep A. Celikkol, Claudia L. Henriquez, Feiyang Ma, Eric Beraut, Rachel S. Meyer, and Victoria L. Sork
- 1029–1037 **Generating Stable Knockout Zebrafish Lines by Deleting Large Chromosomal Fragments Using Multiple gRNAs**
Brian H. Kim and GuangJun Zhang
- 1039–1050 **Type I-F CRISPR-Cas Distribution and Array Dynamics in *Legionella pneumophila***
Shayna R. Deecker and Alexander W. Ensminger
- 1051–1062 **The Developmental Transcriptome of *Aedes albopictus*, a Major Worldwide Human Disease Vector**
Stephanie Gamez, Igor Antoshechkin, Stelia C. Mendez-Sanchez, and Omar S. Akbari
- 1063–1075 **Selective Sweeps Under Dominance and Inbreeding**
Matthew Hartfield and Thomas Bataillon
- 1077–1086 **The Tempo and Mode of Angiosperm Mitochondrial Genome Divergence Inferred from Intraspecific Variation in *Arabidopsis thaliana***
Zhiqiang Wu, Gus Waneka, and Daniel B. Sloan
- 1087–1098 **Genetic Basis of Increased Lifespan and Postponed Senescence in *Drosophila melanogaster***
Grace A. Parker, Nathan Kohn, Ally Spirina, Anna McMillen, Wen Huang, and Trudy F. C. Mackay
- 1099–1112 **Multiple Requirements for Rab GTPases in the Development of *Drosophila* Tracheal Dorsal Branches and Terminal Cells**
Benedikt T. Best and Maria Leptin
- 1113–1124 **Multi-trait Genomic Prediction Model Increased the Predictive Ability for Agronomic and Malting Quality Traits in Barley (*Hordeum vulgare* L.)**
Madhav Bhatta, Lucia Gutierrez, Lorena Cammarota, Fernanda Cardozo, Silvia Germán, Blanca Gómez-Guerrero, María Fernanda Pardo, Valeria Lanaro, Mercedes Sayas, and Ariel J. Castro
- 1125–1136 **Absence of a Faster-X Effect in Beetles (*Tribolium*, Coleoptera)**
Carrie A. Whittle, Arpita Kulkarni, and Cassandra G. Extavour

1137–1148

The Unique Antimicrobial Recognition and Signaling Pathways in Tardigrades with a Comparison Across Ecdysozoa

Marc A. Mapalo, Kazuharu Arakawa, Caitlin M. Baker, Dennis K. Persson, Denise Mirano-Bascos, and Gonzalo Giribet

FEATURED ARTICLE

1149

CORRIGENDUM