



## Convention on Biological Diversity

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### AD HOC TECHNICAL EXPERT GROUP ON RISK ASSESSMENT

Online, 30 March - 3 April 2020  
Item 3 of the provisional agenda\*

### LIST OF BIBLIOGRAPHIC REFERENCES ON ENGINEERED GENE DRIVES AND LIVING MODIFIED FISH

*Note by the Executive Secretary*

#### I. INTRODUCTION

1. In [decision CP-9/13](#), the Conference of the Parties serving as the meeting of the Parties to the Cartagena Protocol on Biosafety (COP-MOP) decided to convene the Ad Hoc Technical Expert Group (AHTEG) on risk assessment and risk management to work in accordance with the terms of reference annexed to that decision. In the same decision, the Conference of the Parties serving as the meeting of the Parties to the Cartagena Protocol requested the Executive Secretary to commission two studies informing the application of annex I to (a) living modified organisms containing engineered gene drives and (b) living modified fish and present them to the online forum and the AHTEG. The Conference of the Parties serving as the meeting of the Parties to the Cartagena Protocol also requested the Executive Secretary to collect relevant information to facilitate the work of the AHTEG.
2. Based on the above, the Secretariat has compiled a list of references from various sources with the aim to support the deliberations of the AHTEG by providing background information that may be relevant for discussion on the various agenda items.
3. The present compilation of references contains references submitted through the submissions of information on risk assessment and risk management (section II), references shared during the Open-Ended Online Forum on Risk Assessment and Risk Management (section III), as well as other additional references on the topics of engineered gene drives and living modified fish (section IV).
4. The references include peer-reviewed articles, opinion documents and perspectives.

#### II. LIST OF REFERENCES PROVIDED IN SUBMISSIONS OF INFORMATION

##### Engineered gene drives

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#### *Online resources*

BioTip pilot study: Genetic innovations as a trigger for phase transitions in the population dynamics of animals and plants (GeneTip): <https://www.genetip.de/en/biotip-pilot-study/>

Data61 Ecological and Environmental Risk Assessment Team: <https://data61.csiro.au/en/Our-Research/Programs-and-Facilities/Analytics-and-decision-sciences/DEERA>

European Food Safety Authority Genetically modified organism applications: regulations and guidance: <http://www.efsa.europa.eu/en/applications/gmo/regulationsandguidance>

European Food Safety Authority Public consultations planner: <https://www.efsa.europa.eu/en/consultations/consultationsplanner>

Foundation for the National Institutes of Health (FNIH) Gene drive researchers forum: <https://fnih.org/what-we-do/current-lectures-awards-and-events/gene-drive-research-forum>

International Centre for Genetic Engineering and Biotechnology eLearning Showcase: <https://showcase-icgeb.elearning.it/>

International Institute for International Development - Experimental lakes Area: <https://www.iisd.org/ela/>

International Life Sciences Institute (ILSI) Research Foundation “Application of Problem Formulation to the Environmental Risk Assessment of Genetically Engineered Crops” course: <https://ilsirf.org/elearning-courses/pfera/>

National Public Radio – Goats and Soda - VIDEO: The 7 Dwarfs Whistle While They Work To Fight Malaria: <https://www.npr.org/sections/goatsandsoda/2018/08/19/638948839/video-the-7-dwarfs-whistle-while-they-work-to-fight-malaria>

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World Health organization Overview of intervention classes and prototypes/products under Vector Control Advisory Group (VCAG) review for assessment of public health value (as of 1 November 2019): <https://apps.who.int/iris/bitstream/handle/10665/274451/WHO-CDS-VCAG-2018.03-eng.pdf?ua=1>

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## **Topic 2: Living modified fish**

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#### *Online resources*

BioTip pilot study: Genetic innovations as a trigger for phase transitions in the population dynamics of animals and plants (GeneTip): <https://www.genetip.de/en/biotip-pilot-study/>

Department of Fisheries and Aquatic Sciences at the University of Florida: <http://sfrc.ufl.edu/fish/>

DIYBiosphere: <https://sphere.diybio.org/>

Government of Canada - New substances risk assessment summaries: organisms: <https://www.canada.ca/en/environment-climate-change/services/managing-pollution/evaluating-new-substances/biotechnology-living-organisms/risk-assessment-decisions.html>

Taikong Corporation: <http://www.azoo.com.tw/>

Testbiotech - comment on the IUCN report “Genetic frontiers for conservation, an assessment of synthetic biology and biodiversity conservation” <https://www.testbiotech.org/content/testbiotech-comment-iucn-report-conservation-synthetic-biology>

The Cuttlefish Project: <https://opensourcecuttlefish.com/>

The Odin - Frog Genetically Engineering kit: <https://www.the-odin.com/frog-ge-kit/>

#### IV. ADDITIONAL REFERENCES

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