

Application Reference No: **NEMA/AGR/93/2018**Registration No.....**0101***Form of Access Permit*

This permit is hereby granted to **Dr. Mireji, Peter Paul Odhiarnbo** of Kenyan Passport No. **B129786** Biotechnology Research Institute, **KALRO, P.O. BOX 57811 - 00200, Nairobi** in collaboration with **Yale University (YSPH), New Haven, CT 06520-80.34, 25 Science Park, 150 Munson Street, New Haven, CT, 06511, USA** in accordance with regulation 11 of the Environmental Management and Co-ordination (Conservation of Biological Diversity and Resources, Access to Genetic Resources and Benefit Sharing) Regulations, 2006 for the collection of the following genetic resources:

Not more than 200 male and female tsetse flies and/or 2000 components of tsetse flies as tsetse fly parasites (Trypanosomes and Endosymbionts) packaged in well coded vials. Specifically: DNA/RNA/ Carcasses of the Glossina fuscipes fuscipes, Glossina pallidipes, Trypanosoma evansi and Trypanosoma congolense, and their endosymbionts under the study: Control of Tsetse fly Transmitted Diseases in Kenya.

Location at: Tsetse flies infested areas: National Parks; Meru, Tsavo East and West, Amboseli, Chyulu, Ruma, Ol Donyo Sabuk and Mount Kenya National Parks, National Reserves, Shimba Hills, Arabuko Sokoke, Maasai Mara and Nguruman National Reserves, other areas Busia County, Siaya County, Lamu, Hindi, Kibwezi forest, Lambwe valley, Kinango, and Galana ranch.

This permit is issued subject to the Regulations and all agreements concluded pursuant to its grant, and may be suspended, cancelled or revoked should the holder breach any of those agreements and the conditions of issue and those contained in the Regulations.

Dr. Mireji, Peter Paul Odhiarnbo of KALRO and Yale University (YSPH) being the holder of this permit, including his agents and assignees, undertake to abide by the conditions of this permit and to promptly report to the National Environment Management Authority any matter that may prejudice the interests of Kenya and other parties concluded pursuant to the grant of this permit.

Signed:
Director General,
 National Environment Management Authority

Date: **31.10.18**

P.T.O.



ISO 9001 2008 Certified

PERMIT CONDITIONS:-NEMA/AGR/93/2018

1. This approval shall be **valid for 12 months** from the date of issuance and shall not be transferable.
2. This approval is for accessing **NOT MORE THAN 200 male and female tsetse flies and/or 2000** components of tsetse flies as tsetse fly parasites (*Trypanosomes* and *Endosymbionts*) packaged in well coded vials. Specifically; DNA/RNA/ Carcasses of the *Glossina fuscipes fuscipes*, *Glossina pallidipes*, *Trypanosoma evansi* and *Trypanosoma congolense*, and their endosymbionts under the study: Control of Tsetse fly Transmitted Diseases in Kenya. Collected samples to be exported to Yale University (YSPH), New Haven USA for advanced genetic analysis.
3. The samples shall retain their original KALRO/KWS references. The accessed genetic resources and its derivatives shall be strictly held in KALRO/ KWS and Yale University (YSPH), New Haven USA.
4. You shall ensure that the samples are well treated and preserved using the provided standards and procedures before storage and export to Yale University (YSPH), New Haven USA.
5. You shall ensure that the basic analysis of the genetic resource such as identification, cataloging, analyzing and preservation of the samples to good laboratory standards are done locally at the Biotechnology Research Institute. You shall ensure that the local partner: KALRO/KWS is involved in the collection, identification and preparations of the samples for export.
6. The genetic resource and the derivative shall not be transferred to a third party without the consent of the genetic resource providers KWS and NEMA. The genetic resource and the derivative shall not be used for commercial or profit purpose without understanding from genetic resource providers KWS and NEMA.
7. You shall deposit and keep records of all duplicates of the genetic resources with the relevant lead agency, KALRO, KWS and provide evidence of deposition to NEMA.
8. You shall ensure that there is reasonable access by all Kenyan citizens to all genetic resources and information collected whether such genetic resources and intangible components including digital sequencing are held locally or abroad.
9. Ensure that all agreements entered into with respect to access of genetic resources shall be strictly for the purposes for which they were entered into. You shall abide by the provision of the Material Transfer Agreements entered with the providers of genetic resources.
10. You shall ensure that the local community/s Traditional knowledge on the genetic resources including **digital sequences** and their uses are well safeguarded.
11. You shall furnish quarterly reports to NEMA on the status of research, including all discoveries from research involving genetic resources and/or intangible components. You shall comply with the improvement orders issued by NEMA's environmental inspectors throughout the project cycle.
12. NEMA reserves the right to suspend, cancel, revoke or vary this permit in the event of a breach of the conditions stated herein or any contravention to the Environmental Management and Coordination Act, CAP 387 and regulations thereunder.
13. Upon the completion of the intended studies, you shall return the remaining genetic resource to Kenya and deposit with the relevant lead agency KALRO/ KWS and notify NEMA of the return.