



# *Esenia Fetida*(earthworm)

**Ahmad A. Dashti**

Intro. to Genomics

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# Outline

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# Fact's

- *Eisenia Fetida* sp. are raised by farmers and widely used for vermicomposting.
  - Recycling of organic matter and produce a rich organic soil.
- They are usually known by common names redworms, dung worms and tiger worms.



# My selected paper

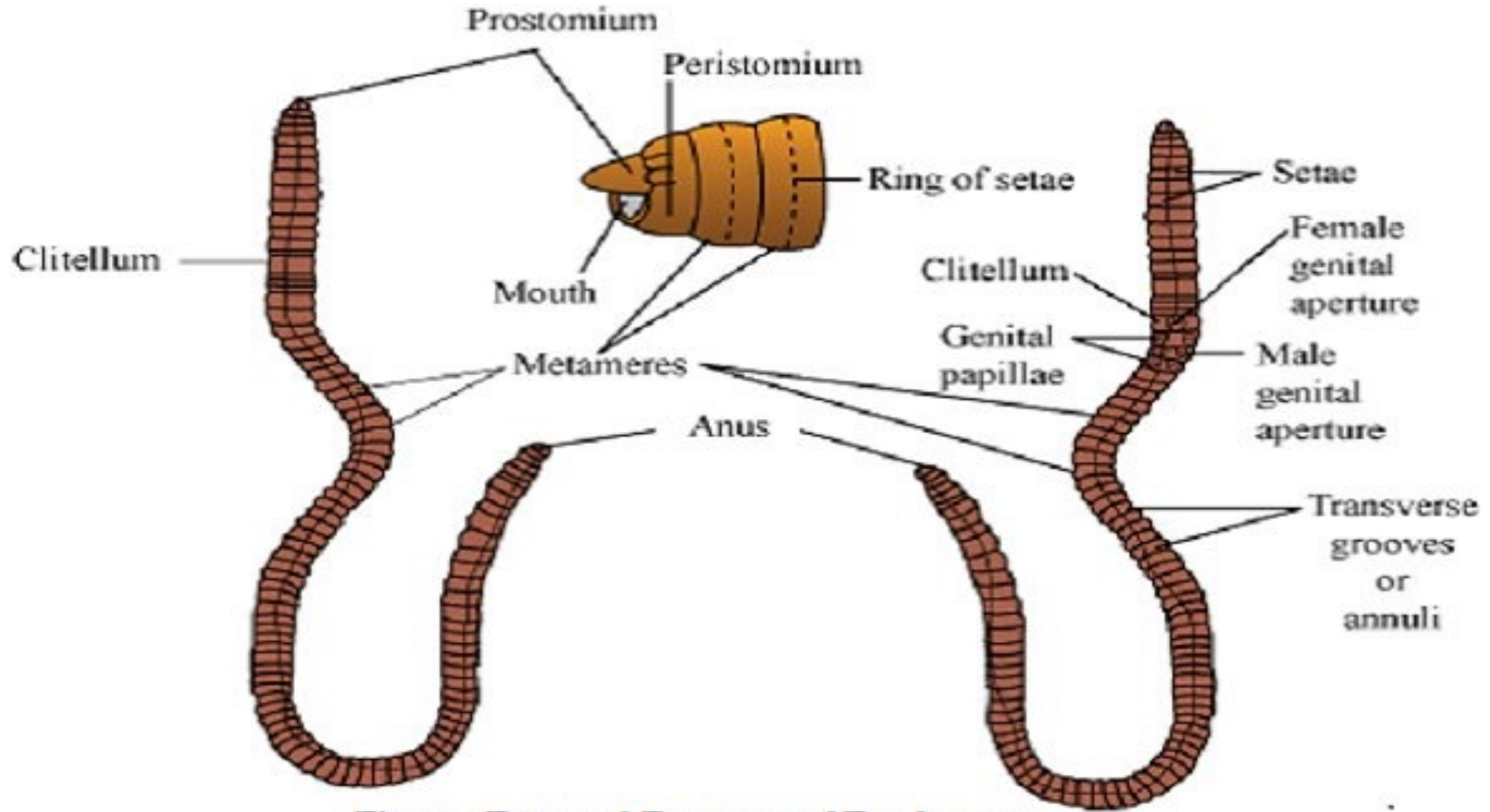


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# Taxonomy

- K: Animalia
  - P: Annelida
    - C: Clitellata
      - O: Opisthopora
        - F: Lumbricidae
          - G :*Eisenia*
          - S:*Eisenia Fetida*

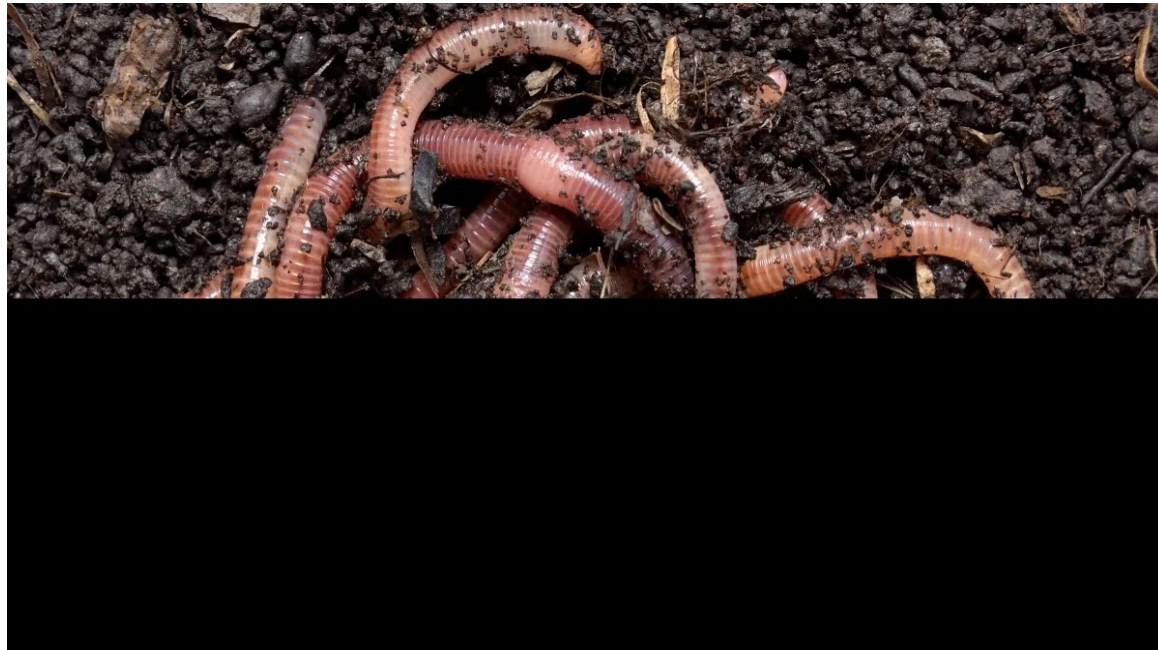
# Physical characteristics



**Figure: External Features of Earthworm**

# Geographic Distribution

- It is found extensively around the world in various habitats and not only in the ground.



# Life cycle




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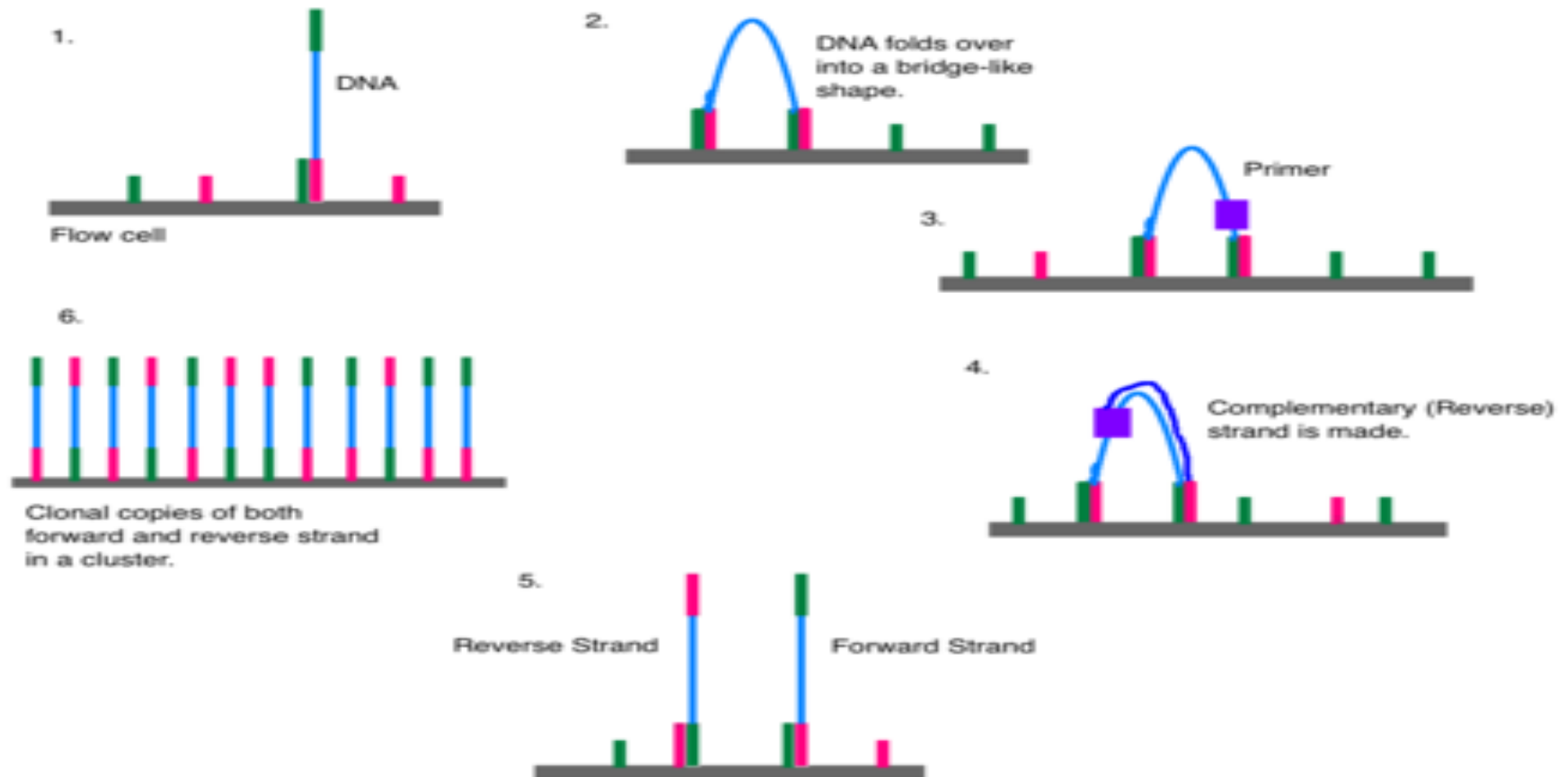
# Sequenced sample info

- Digestive system of earthworm:
  - The digestive system consists of the pharynx, the esophagus, the crop, the intestine and the gizzard.

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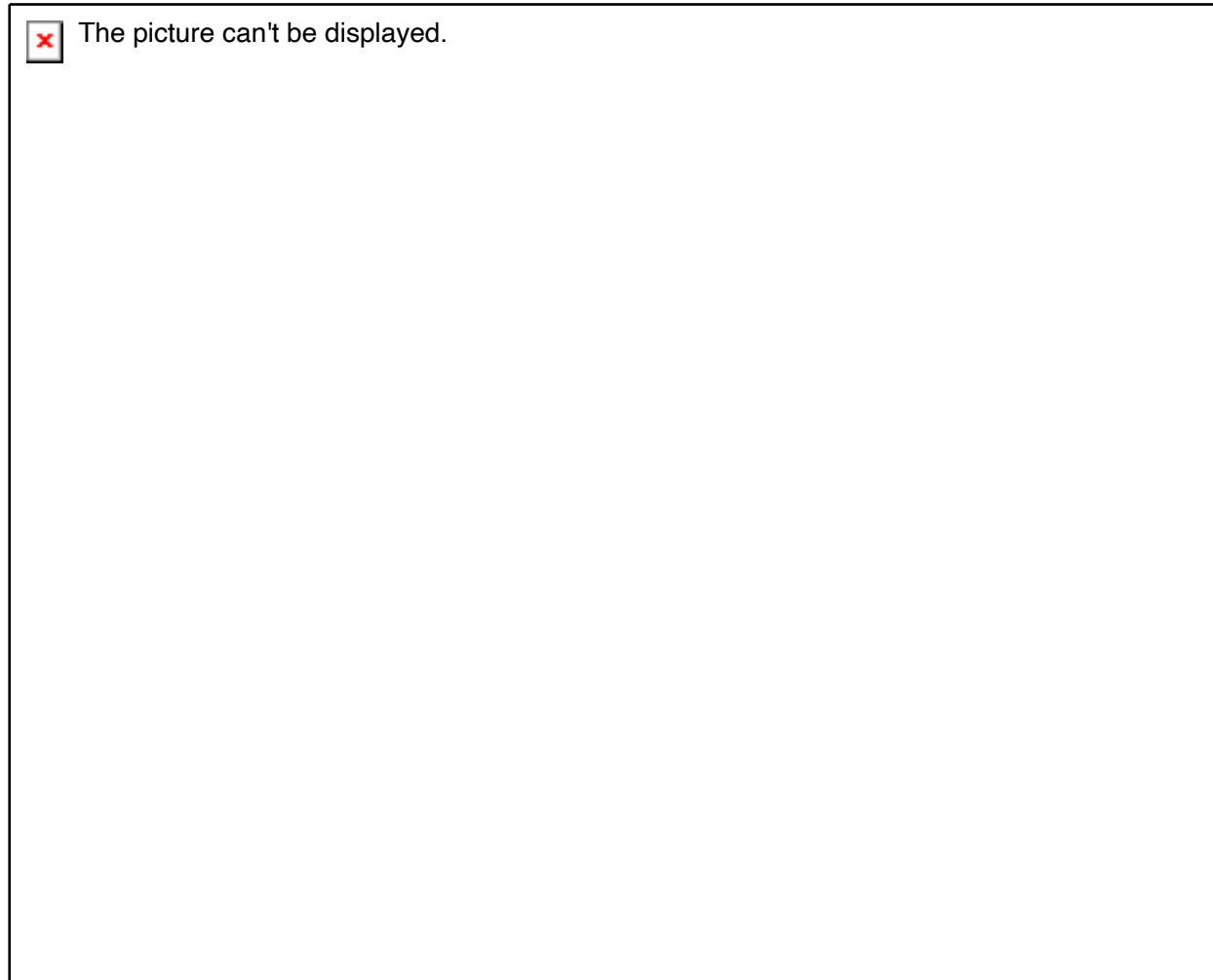
# Sequencing strategy

- Using Illumina sequencing strategy.



# Sequenced method

- Using BACs and PacBio sequencing was used.



# Genome assembly

- 180 scaffolds
- Genome coverage = 39 X
- N50 scaffolds length = 1850

# Genome outcome

- *Eisenia fetida* are highly amenable to laboratory manipulation.
- The basic body plan of *E. fetida* consists of a head followed by a segmented trunk and a tail.