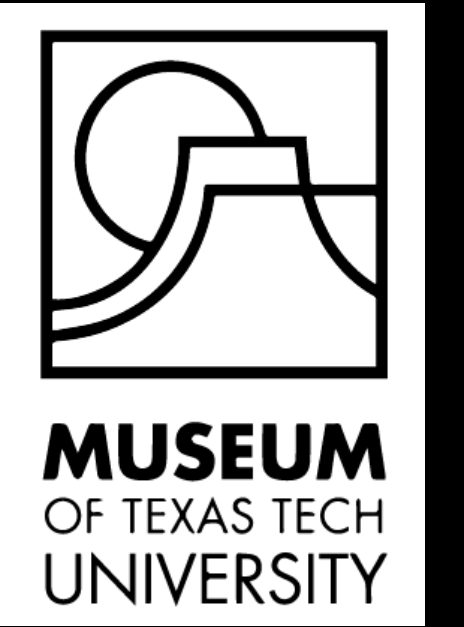


# Curating and Databasing Robber Flies of the Invertebrate Zoology Collection Museum of Texas Tech University

**Rachael Johnston**

1. Plant and Soil Science Department 2. Invertebrate Zoology Collection, Natural Science Research Laboratory, Museum of Texas Tech



## Background

Robber flies (Asilidae) are a cosmopolitan family of flies in the order Diptera. Robber flies are predatory insects that feed on a variety of other insects that can include grasshoppers, butterflies, bees, and wasps. Through their predation, robber flies provide beneficial ecosystem services by keeping the balance of nature in check.

Through collection and preservation, robber flies can provide essential knowledge on their importance to the ecosystem.

## Curation and Databasing

To keep records of specimens accounted for and make them available to the public, specimens are given a catalog number to be digitized into the collective online platform, Ecdysis. Ecdysis is an online platform used to database information on arthropods for educational and research purposes.

Most specimens found within this collection were collected by faculty and students associated with entomology courses at Texas Tech, or by external donors, from 1934 through 2023. A large percentage of the collection was previously curated and identified and is organized alphabetically by taxonomic name into unit trays and drawers.

Once the specimens are identified and organized, they are each assigned a catalog number before transcribing data from their pinned labels to the Ecdysis platform. Data from the specimen may include:

- Locality
- Collector
- Collection date
- Genus and species

Localities were georeferenced with Google Maps.




Identify and Organize Specimens

Assign Specimen Catalog Number (TTU-Z\_XXXXXX)

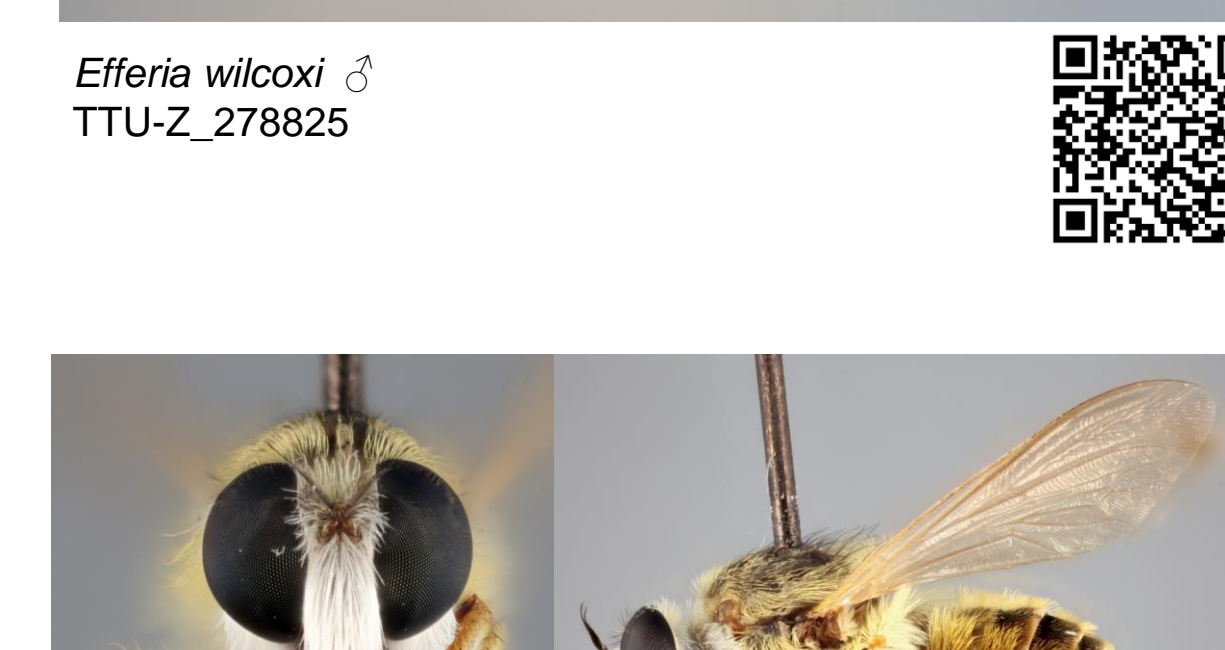
Record Label Information into Ecdysis



*Efferia wilcoxi* ♀  
TTU-Z\_278826



*Efferia wilcoxi* ♂  
TTU-Z\_278825



*Megaphorus pulchrus*  
TTU-Z\_282672



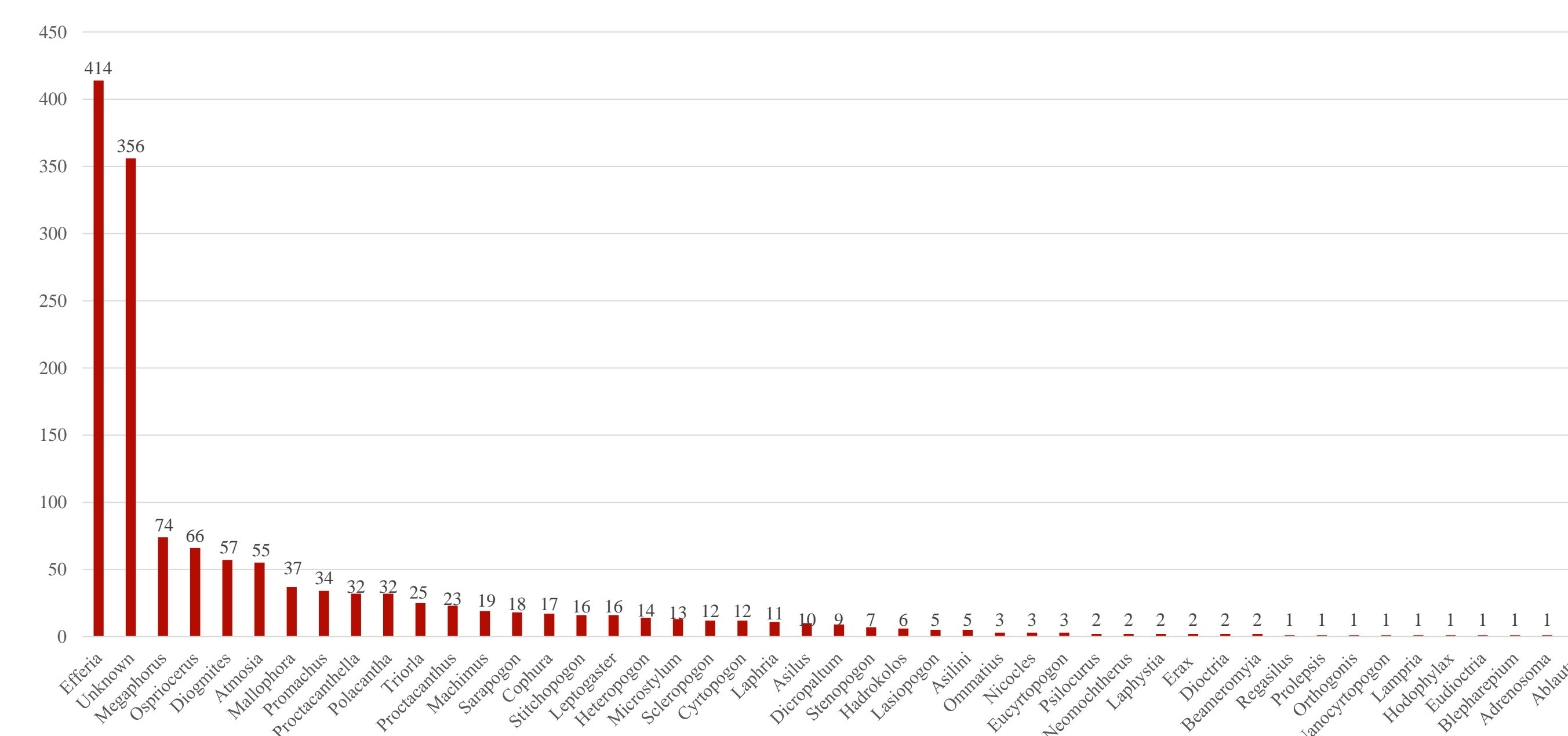
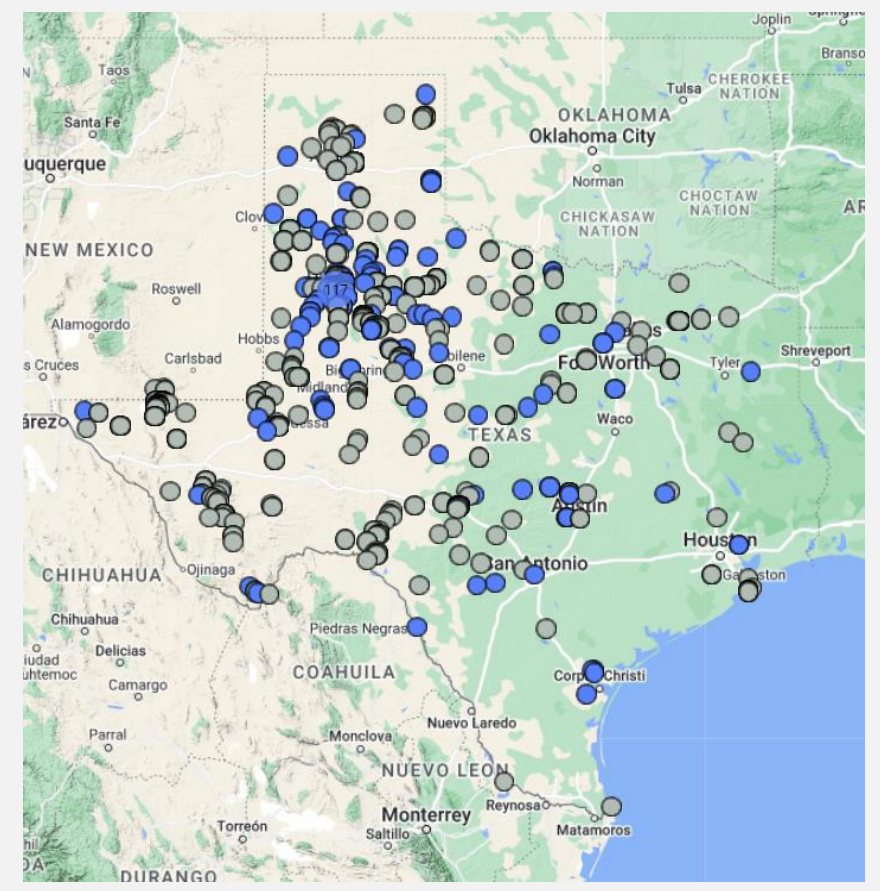
*Megaphorus pulchrus*  
TTU-Z\_282672



## Asilidae Collection

The Invertebrate Zoology Collection of the Natural Science Research Laboratory at the Museum of Texas Tech currently holds a recorded number of 1,426 individual robber flies, representing 46 genera and 123 species. All specimens were collected in the United States, Argentina, Mexico, Panama, and the Philippines. An approximate percentage of the collection's locality includes:

- United States: 93%
- Texas: 77%



## Links of Interest

- Bug Guide 
- Invertebrate Zoology Collection 
- GBIF.org 
- Ecdysis 

## Acknowledgments

I would like to thank Dr. Jennifer Girón for giving me the opportunity to discover and aid in the preservation of the Asilidae collection at the Invertebrate Zoology Collection in the Natural Science Research Laboratory.