

Developing Effective Husbandry Protocols for *Larinoidea*

Reliable laboratory husbandry is essential for maintaining healthy spider populations used in ecological, physiological, and behavioral research. However, standardized protocols remain limited, particularly in spiderlings. This project focused on developing and refining husbandry techniques to optimize spider survival, health, and rearing of young under lab conditions. This study establishes and evaluates husbandry protocols for *Larinoidea* orb weavers (Family Araneidae), a group of riparian spiders known for constructing vertical orb webs and their ecological role as important predators in aquatic-terrestrial food webs. Six adult spiders were collected from the Trinity river in Fort Worth, TX and mated in the laboratory. Their spider hatchlings were maintained in individually prepared vials containing artificial vegetation designed to support web attachment and movement. Feeding regimens using immobilized fruit flies and hydration strategies using a diluted honey solution were implemented. Observations of survival, activity, and general health were recorded. The husbandry system promoted consistent housing and care routines to promote spider survival in a laboratory setting. The methods used provided a reproducible system that consistently allowed spiders to successfully mate, reproduce, and nurse spiders to adulthood. These findings will contribute to the rapidly expanding field of spider husbandry by providing a reproducible husbandry system.