

V. CONCLUSION

A. Conclusion

Based on the results of this study, it can be concluded that:

1. The changes in vegetation and canopy cover at the three waterfalls provide microclimatic variations that influence the daily behaviors of *E. variegata*. Open cover promotes greater light exposure, hence extending basking duration and enhancing dragonfly activity. An optimum microclimate and the presence of aquatic vegetation are crucial elements in facilitating dragonfly activity, distribution, and survival in waterfall environments.
2. The highest average abundance was recorded during the afternoon at Orak Arik waterfall with 19 individuals, while the lowest number was observed in the evening at Telu waterfall with 4 individuals.
3. The longest average duration was recorded during the afternoon at the Telu waterfall, lasting 10 minutes and 7 seconds, and the shortest duration was recorded at the Telu waterfall in the evening, lasting 2 minutes and 11 seconds.
4. The most common behaviors were *grooming*, spreading wings, and perching on obelisks. The least common behavior was mating. The behavioral pattern of *E. variegata* exhibits a daily activity pattern that is contingent upon weather conditions. In bright conditions, dragonflies engage in sunbathing for thermoregulation, subsequently participating in reproductive and predatory behaviors. In contrast, overcast conditions restrict activity, resulting in the dragonfly's passivity. This pattern recurs daily as an adaptation to the microenvironment.

B. Suggestion

Further research should be conducted during the dry season to compare the sunbathing behavior and sunbathing duration of *E. variegata* with those during the rainy season. Variations in air temperature, air humidity, and light intensity may influence the sunbathing behavior and diurnal activity of dragonflies.