

Abstract

Lampyridae commonly known as fireflies, glow worms, or lightning bugs are a very diverse taxon that is known to be distributed globally. They have the ability to emit light through bioluminescence and have attracted public interest because of this. Though bioluminescence in insects is not restricted to this group, the family of fireflies (Lampyridae) contains more bioluminescent species compared to other families. This diverse and easily accessible group is well suited for studies focusing on the function and evolution of bioluminescence. Lampyrids are beneficial to ecosystems around the world and are often keystone species and serving as bioindicator in their habitat. They also play a role in medical and evolutionary science as important study organisms in biotechnology, behavioral ecology, evolution of communication systems, responses to climate change, and conservation biology. This paper presents the ecology and diversity of Lampyridae as well as the state of knowledge globally and in the Philippines. This paper also presents some priority area for future research and conservation.