

## **Hard work Pays Off**

Plants cannot move from place to place to find reproductive partners. They therefore began to rely on a wide range of unrelated organisms to transfer their pollen. Today, around three quarters of flowering angiosperms depend on animals that carry pollen from flower to flower, enabling seeds to develop. In return for this service, pollinators receive pollen or nectar as a reward, giving them the nourishment they need to survive.

The first flowering plants pollinated by animals appeared approximately 135 million years ago during the Cretaceous Period of the Mesozoic Era. Since then, plants and their pollinators have evolved side by side, constantly adapting to one another. This closely connected process of mutual evolution is known as coevolution. While plants gradually refined their flowers and evolved remarkable ways of attracting pollinators, animals changed their body structures and behaviour in response.

Plants and their pollinators live together in symbiosis, most often in a mutually beneficial relationship. Occasionally, however, there are cheats attempting to deceive. Some offer no reward despite expecting pollination, while others try to obtain nectar without carrying pollen. Among plants, orchids are masters of deception. Among animals, certain species simply chew through flowers to steal hidden nectar without pollinating them at all.

## **Diagram of a Typical Flower with Basic Terminology**

Diagram labels: stem, receptacle, calyx, corolla, stamens (anther + filament), pistil (stigma, style, ovary)