

tion of flowers by insects; the problem of galls; the symbiosis of Algæ and Radiolarians; and a hundred other inter-relations. A convenient introduction to the subject will be found in the writer's *Study of Animal Life* and in Prof. Geddes's *Chapters in Modern Botany*.

It is again to Darwin that we are most indebted for our realization of the now familiar biological fact that no animal lives or dies to itself. We refer to such facts as the following:—the existence of quaint partnerships, as of crocodile and crocodile-bird; the closer "commensalism" illustrated by certain hermit-crabs and their companion sea-anemones; the frequent occurrence of parasitism; the establishment of complex domestic and social relations; and the manifold adaptations which may be called "shifts for a living", such as mimicry and masking.

As a particular example we may refer to the investigations of Dr. Wasmann, M. Charles Janet, and others on the "myrmecophilous" animals, *e.g.* small beetles, which live along with ants, and in their varied relations present a close parallel to the animals found in a human dwelling; some are distinctly unwelcome, others are simply tolerated, some are useful, others are mere "pets".

The modern recognition of the fundamental physiological resemblances between plants and animals was a momentous step in the history of biology; the recognition of their bionomical resemblances is hardly less important. The struggle for existence between plants in the tropical forest or in the hedgerow; the many degrees of parasitism of plant upon plant; the living together or symbiosis which is illustrated in the combination of Alga and Fungus to form a Lichen, and so on, are instances of inter-relations among plants which have their parallels in animal life.

If we study Kerner's *Life of Plants*, or Wiesner's *Biologie der Pflanzen*, or a similar work by Ludwig; if we read Rodway's account of death in the tropical forest or Gardiner's sketch of the struggle for existence in a meadow; if we consult Schimper on myrmecophilous