In recent decades, there have been substantial changes in crop production practices. Such changes as decline in oat (Avena sativa L.) acreage, ascendancy of soybean [Glycine max (L.) Merr.] acreage, upsurge in the use of commercial fertilizer, improved corn (Zea mays L.) hybrids, changes in tillage practices, and effective pesticides have had an impact on insect populations. Collective improvements and generally favorable climatic conditions have made it possible to about double the average per-hectare yield of corn in the USA in this period.

Certain insects such as chinch bugs (Blissus spp.) and grasshoppers (locusts), which in the past have been serious pests, in recent years had relatively low populations in most corn-producing areas. Environmental conditions characterized by sustained below-normal rainfall and above-normal temperatures, which are regarded favorable for epizootics of these pests, have not prevailed since the drought years of 1930 to 1936. Effective insecticides are available to cope with local insect problems should they occur.

Nevertheless, the corn crop is subject to attack by a complex of insects from the time it is planted until it is utilized as food or feed. Other crops, particularly small grains, forage grasses, and legumes are sources of insects that attack corn and are also sources of prey that help keep the population complex in balance. This ecological relationship is a part of the corn insect problem. It is important to recognize the universal biological variability within species, their hosts, and where diseases are involved, in pathogens.

The most important corn insect pests (common and scientific names with authors are listed in the appendix) and areas where they occur are: the European corn borer [Ostrinia nubilalis (Hübner)] in North America, Europe, Mideast, and North Africa; the Asian corn borer (O. furnacalis) in Asia and Philippines; the spotted stem borer (Chilo partellus) in Asia and Africa; the Asiatic rice borer [C. suppressalis (Walker)] in Asia; the Oriental corn borer (C. agamemnon) and the pink borer (Sesamia nonagrioides) in Asia, S. calamistis in Africa; the pink stem borer (S. inferens in Asia, S. nonagrioides in Mid-East and