The protected agriculture has become an important technology for increasing farmers' income along with the extension of new technologies in China in recent 10 years. The area for protected agriculture, mainly vegetables and strawberry, is now more than 2.5 million hectares. The figures have been rapidly increasing. The occurrence of soil-borne diseases and nematodes, white flies, vegetable leaf miners, mites and aphids are getting more and more serious because of rapid development of protected agriculture and intensive cultivation. The crop yield and quality is affected after 3-5 years cultivation.

Due to the large population and limited arable land, the field area for a family is about 1400 to 2000 m². Moreover, the greenhouses are very small in China. The average area for a greenhouse is about 400 to 800 m².

The control of diseases and insect pests depends on chemical pesticides conventionally in protected agriculture. However, the IPM technologies are paid more attention and used more and more widely due to the increase of public awareness and training of farmers. These include agricultural control, physical control, biological control, ecological control, and chemical control with low environment impact. The techniques used in agriculture control include use of resistance cultivars, sanitary of protected land, cleaning production, rational use of fertilizer, grafting, biofumigation combined with solarization, soil amendment, deep digging and change soil, altered time for cultivation, substrate, hydroponics, etc. The Physical techniques used for the control of diseases and insect pests include insect-proof screen, yellow board, light attract, solarization, microwave, electronic soil disinfection, steaming, steam injection, hot water disinfection, etc. The most commonly used biological control techniques for insects include Trichogramma, Encarsia formosa Gahan, and predatory mites and for diseases include Trichoderma spp., Pythium oligandrum, Bacillus subtilis, Polyglycerol polyricinoleate(PGPR), etc. Botanic pesticides used include neem, Pyrethrum extract, Matrine (Sophora japonica), etc. Pesticides from microorganisms and insect virus include: Bt, Jingangmycin, Bacillus cereus, Wuyimycin, Metarhizium anisopliae, nuclear polyhedrosis viruses and so forth. Ecological control techniques are also used more and more widely in China. These include regulation of the environmental conditions in which both plants and pests grow, such as temperature, moisture, light, gas and nutrition. Chemicals with low environmental impact are also used. These include: pheromones, new formulations, such as micro-emulsion, tablet, capsule application of liquid fumigants, chemigation, ozone disinfection, sulfur and mineral oil, etc. The new technology will implement better efficacy,
protected natural enemy and environment.

The monitoring of the occurrence and the development of diseases and insect pests in protected land becomes crucial to the rationally use of the IPM technologies.