CLEAN ECOLOGICAL METHODS FOR CONTROL OF URBAN PESTS

VALENTIN B. SAPUNOV
Russian State Hydrometeorological University, Sankt-Petersburg State Agricultural University, St. Petersburg, Russia

Abstract  Increasing pest diversity in urban areas is a reality of modern time. Actual biological technologies are unable to prevent this process. Sometimes control leads to negative results, in particular the use of chemical pesticides. Use of clean ecological methods must be the strategy of the future. The basis of such a technology must be imitation of wild nature processes. There are 4 groups of such a technique. They are: ecological, genetic, chemical and ecological, physical and ecological. Ecological ones are based on natural intra species relations. They are: competition, host-parasites and predator-prey. The use of competition is the only way to completely replace a pest species by a less dangerous one. Genetic methods are based on selection and gene engineering. Chemical and ecological methods are based on the use of natural compounds with biological activity, or their analogues. Such compounds are: hormones, anti hormones, biological toxins, attractants and repellents. Ecological-and-physical methods are based on the use of acoustic (sound, ultrasound, infrasound) or electromagnetic energy. The composition and rotation of all these methods may become the basis for effective control of urban pest populations.