Biological pest control in greenhouses
- exposure, allergies and their prevention

This project, led by the Finnish Institute of Occupational Health, studies workers’ exposure and allergies to greenhouse-related factors such as pest control organisms and production plants. The aim is to promote workers’ health through the early identification of allergic diseases and the development of safe production methods.

Allergies from greenhouse work?
Several cases of allergic diseases such as rhinitis, asthma or rashes are annually diagnosed among greenhouse workers in Finland. These diseases are caused by micro-organisms used in biological control, tomatoes, cucumbers and peppers. Pollinators such as greenhouse guns can also cause allergies. Allergic workers may not be able to continue working in greenhouses. The prevalence of these allergies is unknown.

Objectives of the project
• To study greenhouse exposures that can cause allergic diseases
• To determine how common respiratory and skin symptoms and allergies are among greenhouse workers
• To produce simple guidelines and operational models for improving workplace hygiene and preventing allergic diseases
• To identify allergens in pest control organisms, and to develop allergy tests using these and other greenhouse exposures

The abovementioned issues will be investigated through workplace assessments and clinical investigations of greenhouse workers mainly in the Ostrobothnia region. We will also analyse patient files of greenhouse workers investigated in the 2000s. We aim to expand the knowledge regarding allergy risks, to develop guidance and diagnostics and to prevent allergic diseases in the greenhouse sector.

For additional information, contact the Project Co-ordinator, Pirjo Hölttä, Specialist in Occupational Health Services, Medical Doctor (pirjo.holtta@ttl.fi).

The project will be carried out in 2018–2020.

The project is mainly financed by the Finnish Institute of Occupational Health and the Finnish Work Environment Fund.

Co-operative partners: Biotus Oy, Schetelig Oy, Finnish Glasshouse Growers’ Association, Österbottens Svenska Producentförbund, the Industrial Union, the Federation of Agricultural Employers MTA, KristinaMedi, Evira, Natural Resources Institute Finland Luke, and LähiTapiola Insurance Company.

Five greenhouse entrepreneurs have so far agreed to participate. *Are you interested? We still need greenhouses and their employees for our study!*