

Abstract

Faba bean necrotic yellows virus (FBNYV) was isolated from naturally infected faba bean plants in Jordan. The identification was based on host range, mode of transmission, symptomatology and serological properties. FBNYV occurred naturally in several leguminous crops including cultivated legumes and wild forage legumes, such as species of *Medicago*, *Trifolium* and *Lathyrus*, and infected other plant species belonging to the Malvaceae, such as *Malva parviflora* and *Hibiscus esculentus*. Such hosts may act as important natural reservoirs for both the virus and its aphid vectors. This is the first report of infection of *M. parviflora* and *H. esculentus* with FBNYV. The virus was not recovered from samples taken from some cultivated crops, including squash, cucumber, tomato, eggplant and pepper, growing near to faba bean fields. Also, it was not detected in commercial faba bean seeds collected from local companies or in seeds collected from infected faba bean plants. It was transmitted efficiently by *Aphis craccivora*. Serological testing of 1392 samples from faba beans showing virus-like symptoms and collected randomly from 16 locations (fields) in the Jordan Valley and Jarash areas showed that FBNYV occurred in 54.5% of the samples. These results indicate that FBNYV was an important pathogen of beans during the growing season of 1996 in Jordan.