

International Plant Protection Convention (IPPC) country report by the National Plant Protection Organization (NPPO) of South Africa: Notification on the First detection of *Citrus leprosis-N* in South Africa

Pest	<i>Citrus leprosis</i>
Status of pest	Undetermined
Host or articles concerned	<i>Citrus</i> spp.
Other Hosts	Fifty species from the family: Orchidaceae including important commercial orchids – <i>Cymbidium</i> spp, <i>Calanthe</i> spp and <i>Dendrobium</i> spp.
Geographic distribution	Symptoms resembling <i>Citrus leprosis-N</i> disease were detected on 23 May 2018 in Valencia and Navel type (<i>C. sinensis</i>) orchards on two citrus farms in the Addo area (Sundays River Valley) in the Sarah Baartman District Municipality in the Eastern Cape province of South Africa. Similarly also detected on a farm in the Gamtoos River Valley.
Nature of immediate or potential danger	The production capacity and fruit quality of affected citrus orchards is threatened.
Summary	<p><i>Citrus leprosis-N</i> disease causes symptoms on leaves, fruit and twigs (green bark). The viruses are transmitted by <i>Brevipalpus</i> spp. (flat mites). These viruses are of the lifetime circulative type inside the mite, and the mite can transmit the virus once it has acquired the virus through feeding on infected plant tissue. The virus is not systemic in the host plant. The disease is controlled by controlling the mite vectors, as well as removal of inoculum sources (symptomatic citrus tissue as well as alternative hosts).</p> <p>The disease, <i>Citrus leprosis</i> is caused by different types of RNA viruses, commonly referred to as either the cytoplasmic type (CL-C) belonging either to the <i>Cilevirus</i> or <i>Higrevirus</i> genus or the nuclear type (CL-N) belonging to the genus <i>Dichorhavirus</i>. Viruses of the CL-C type include <i>Citrus leprosis Virus-C</i>, <i>Citrus leprosis virus-C2</i> and <i>Hibiscus green spot virus</i>.</p> <p>Viruses of the CL-N type include <i>Citrus leprosis Virus-N</i> and <i>Orchid fleck virus</i> (OFV). Molecular diagnostics were used to identify the presence of a virus belonging to the <i>Dichorhavirus</i> genus and full-genome determination of the virus showed closest sequence identity to a <i>Cymbidium</i> isolate of OFV. OFV was previously found on orchids in South Africa.</p>