Disease Note

FIRST REPORT OF *GARLIC COMMON LATENT VIRUS* IN GARLIC FROM NIGERIA

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Garlic (*Allium sativum* L.) is one of the oldest known horticultural crops of the world. Several viruses belonging to the genera *Potyvirus*, *Carlavirus*, *and Allexivirus* are known to infect garlic and reduce their yield worldwide (Dijk, 1994; Walkey and Antill, 1989). This study was undertaken to investigate the status of viral infection in Nigerian garlic. Ten garlic bulbs collected in March of 2015 from two fields in Kano and Sokoto region of Nigeria were tested by direct antigen coated (DAC)-ELISA with antisera to *Garlic common latent virus* (GarCLV) (Bioreba, Reinach, Switzerland). All the samples were positive for GarCLV. To confirm the presence of GarCLV, reverse transcription (RT)-PCR was performed using primers published earlier (Majumder and Baranwal, 2014) and total RNA extracted from 100 mg of leaves with the RNeasy Plant Mini kit (Qiagen, GmbH, Hilden, Germany) according to the manufacturer's instructions. Expected amplicons of *ca*. 450 bp were obtained from all the samples tested. Direct sequencing of the PCR products from one sample produced a 418-bp long nucleotide sequence. It showed 95% identity with a garlic isolate from The Netherlands (GenBank accession No. AB004804). To our knowledge, this is the first report of GarCLV on garlic in Nigeria.

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Disease Note

FIRST REPORT OF *GRAPEVINE PINOT GRIS VIRUS* IN COMMERCIAL GRAPEVINES IN SOUTHERN CHINA

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Grapevine Pinot gris virus (GPGV) was first discovered on 'Pinot gris' grape showing chlorotic mottling and leaf deformation symptoms in Italy (Giampetruzzi *et al*., 2012). Recently, GPGV was detected in grapevine in northern China (Fan *et al*., 2016). However, occurrence of the GPGV in southern China was unknown. In a survey performed in early 2014, leaves with chlorotic mottling and deformation symptoms were observed on 'Shine Muscat' grapes in three southern Chinese provinces, and a total of 24 symptomatic leaf samples were subsequently collected in 2014 and 2015 from Hainan (5 samples), Guangxi (11 samples) and Guangdong (8 samples). Additionally, twenty nine leaf samples were also collected from asymptomatic 'Shine Muscat' plants in Guangxi. Total RNA of each sample was extracted and amplified by a two-step RT-PCR with primer pair GPgV5619f/GPgV6668r (Giampetruzzi *et al*., 2012) targeting the movement protein gene. RNA extracted from virus-free 'Shine Muscat' plants was used as negative control, while no positive control was used. Finally, a specific 1049 bp amplicon was obtained from 14 samples, 1 of which was from Hainan, 9 from Guangxi, and 4 from Guangdong. One of the amplicons was purified, cloned and sequenced (3 colonies), and a 1049 bp consensus sequence was obtained (KU987455). BLASTn analysis showed that this 1049 bp sequence shared the highest identity, 96.7%, with GPGV isolate BC-1 from Canada (KU194413). Furthermore, presence of GPGV in the 14 positive samples were confirmed by an additional two-step RT-PCR with primer pair GPGVCP1A/GPGVCP1B (Fan *et al*., 2016) targeting coat protein gene of GPGV. To our knowledge, this is the first report of GPGV in commercial grapevine in southern China.

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