First report of 'Candidatus Phytoplasma aurantifolia' (16SrII) associated with potato purple top in San Gabriel-Carchi, Ecuador

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During April 2015 common phytoplasma symptoms such as potato purple top, aerial tubers and witches' broom were observed in 70% of commercial potato plantations (Solanum tuberosum) in San Gabriel-Carchi, Ecuador (Fig. 1). In Ecuador, there had not been any previous reports of this disease. However in Carchi the disease is rapidly spreading and is causing serious economic losses to potato producers. To confirm the association of symptoms with a phytoplasma infection, DNA was extracted from 300 mg of leaf midribs and petioles from symptom-bearing (five samples) and symptomless (five samples) potato plants using a CTAB method (Doyle & Doyle, 1990) and was purified with PureLink® Plant Total DNA Purification Kit (Invitrogen™, ThermoFisher Scientific). Phytoplasma DNA was amplified by nested PCR with the universal primers P1/P7 (Deng & Hiruki, 1991; Schneider et al., 1995) followed by fU5/rU3® powered by TCPDF (www.tcpdf.org). For more information visit http://www.ndrs.org.uk/ for high quality versions of the figures can be found.

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