

OCCURENCE OF VIRUSES ON SWEET POTATO COMMERCIAL FIELDS IN BRASÍLIA AND SÃO PAULO / Ocorrência de viroses em batata-doce em áreas comerciais de Brasília e São Paulo. M. G. da Silva<sup>1</sup>; R. L. de Souza<sup>1</sup>; S. M. N. M. MONTES<sup>2</sup>; D. R. OLIVEIRA<sup>3</sup>; <u>A.F.S.</u> <u>MELLO<sup>1</sup></u>. <sup>1</sup>Brazilian Agricultural Corporation, Embrapa Vegetables, 70275-970, Brasilia, Brazil / <sup>2</sup>Regional Pole of Technological and Development of Agribusiness – APTA, 19015-970, Presidente Prudente, Brazil / <sup>3</sup>Federal District Technical Assistance and Extension Company, EMATER-DF, 73570-000, Brasilia, Brazil. E-mail: alexandre.mello@embrapa.br

Sweet potato is a staple crop in Brazil and it is planted in more than 40,000 hectares in all the different regions of the country. With the exception of the south region, where the weather is not conducive for planting all year long, the other states in Brazil use vine cuttings from previous crops to establish new commercial fields. The lack of fallow with no crop rotation and use of propagative material harvested in open field increases the spread and accumulation of pathogens in the field, leading to a potential gradual reduction on yield and root quality. In Brazil, very little is known about the prevalence and impact of different viruses on sweet potato productivity. The goal of this work was to assess the most prevalent viruses present on two different regions Brasília, DF and São Paulo, SP. Stem samples from symptomatic and asymptomatic sweet potato plants were sampled in 25 commercial growers in different counties and were grafted inoculated on the indicator plant Ipomoea setosa. Fourty-five days post grafting leaves were sampled and tested by NCM-ELISA. The presence of ten different viruses was assessed using commercial antisera produce by the International Potato Center (CIP). None of the sweet potato plants sampled from Brasilia fields presented symptoms and this was confirmed on the evaluation of the grafted plants when only one of the fifty-one samples was positive for the Sweet potato chlorotic fleck virus (SPCFV). From the 86 samples tested, 30 samples from São Paulo state yielded positive results. Viruses were identified in single and double infections with prevalence of Sweet potato C6 virus (SP6CV). Sweet potato collusive virus (SPCV) and Sweet potato chlorotic stunt virus (SPCSV). Studies with next generation sequencing will now be performed to compare the results and assess the occurrence of different viruses. These results suggest that the agronomical practices used in São Paulo and/or the occurrence of viruleferous insect vectors are greater in São Paulo than in Brasília.

Key words: Ipomoea setosa, Diagnosis, Grafting