



# THE NIGERIAN SOCIETY FOR PLANT PROTECTION



PROGRAMME AND  
BOOK OF ABSTRACTS

**45<sup>TH</sup>  
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CONFERENCE AND  
50<sup>TH</sup> ANNIVERSARY**  
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2020**



**Theme:**

**STRENGTHENING THE NEXUS BETWEEN  
RESEARCH, INDUSTRY AND POLICY IN  
PLANT PROTECTION FOR INCREASED  
AGRICULTURAL PRODUCTION**

DATE:  
**MARCH  
15TH - 19TH,  
2020**

TIME:  
**9AM TILL  
4PM DAILY**

VENUE:  
**FACULTY OF AGRICULTURE,  
UNIVERSITY OF UYO  
MAIN CAMPUS, AKWA IBOM**



**Incidence of yam viruses in some Local Government Areas of Niger state, Nigeria**

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**ABSTRACT**

Yam (*Dioscorea* spp) is a major staple food for most people in Nigeria and the country accounts for highest production worldwide. Virus diseases are responsible for losses in crop production and quality all over the world. Therefore, the need to survey and identify the virus types within a particular area is important in order to help the yam farmers. The objective of this study was to determine the viruses infecting yam in some Local Government Areas (Bosso, Mokwa, Munya, Paikoro and Shiroro) of Niger State, Southern Guinea Savannah of Nigeria. One hundred and twenty symptomatic leaf samples of yam plants were collected randomly from 20 fields during the 2019 cropping season. The samples were analysed for viruses using Double Antibody Sandwich Enzyme-Linked Immunosorbent Assay (DAS-ELISA) with two polyclonal antibodies (PABs) for *Yam mosaic virus* (YMV) and *Cucumber mosaic virus* (CMV). Symptoms observed on the fields included leaf chlorosis, mosaic, mottling, leaf deformation and stunted growth. Twenty-one percent (21 %) of the samples collected from Paikoro LGA reacted to YMV PABs and 4 % were positive for CMV. Moreover, 4 % of the samples collected from Munya LGA tested positive for YMV. There were no positive reactions to YMV and CMV PABs in Bosso LGA. Also, none of the Mokwa and Shiroro samples reacted positively with YMV and CMV PABs. The study revealed that YMV was more prevalent than CMV in the study Area. Studies are underway to investigate the pathogenicity of the identified inocula on popular yam varieties in the country.

**Keywords:** Survey, Yam viruses, *Cucumber mosaic virus*, *Yam mosaic virus*, Niger State