

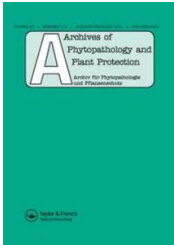
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# Incidence and diversity of viruses in cowpeas and weeds in the unmanaged farming systems of savanna zones in Nigeria

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dc.contributor.author	Kumar, P. L.	
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dc.description.abstract	Fields surveys were conducted to assess the incidence of commonly known legume viruses on cowpeas and weed hosts within and around the cowpeas farms in nine locations across the three agro-ecological zones of Nigeria. Of 315 cowpea leaf samples collected and tested for eight viruses, 69.5% were found to be infected. Bean common mosaic virus-blackeye mosaic (BCMV-BICM), genus Potyvirus had the highest incidence (70%) and was also the most prevalent (78%). Cowpea aphid-borne mosaic virus (CABMV, genus Potyvirus) had 64% as incidence, incidence of Southern bean mosaic virus (SBMV, genus Sobemovirus) was 21%. Bean pod mosaic virus (BPMV, genus Comovirus) was detected in 1% of the samples tested. Cowpea mosaic virus (CPMV, genus Comovirus) was undetected. Other viruses tested included Cowpea mottle virus (CPMoV, genus Carmovirus), Cucumber mosaic virus (CMV, genus Cucumovirus), and Cowpea mild mottle virus (CPMMV, genus Carlavirus). Multiple virus infections were detected in 68.0% of the infected cowpea leaf samples. The combination of BCMV-BICM and CABMV was the most common, occurring in 76.4% of all samples. Virus incidence in weeds around the cowpea plots was 2.5% (9 out of 356) whereas 1.5% (5 out of 332) of the weeds collected within the cowpea plots were infected. Some of the weeds infected were Chromolaena odorata, Centrosema sp., Thitonia diversifolia and Talinum triangulare.	en_US
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