







POSTER

A low-cost 3-D printed smartphone add-on spectrometer for diagnosis of crop diseases in field




Authors:  [Godliver Owomugisha](#),  [Pius K. B. Mugagga](#),  [Friedrich Melchert](#),
 [Ernest Mwebaze](#),  [John A. Quinn](#),  [Michael Biehl](#) [Authors Info & Affiliations](#)

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ABSTRACT

We present our initial proof of concept study towards the development of a low-cost 3-D printed smartphone add-on spectrometer. The study aimed at developing a cheap technology (less than 5 USD) to be used for detection of crop diseases in the field using spectrometry. Previously, we experimented with the problem of disease diagnosis using an off-the-shelf and expensive spectrometer (approximately 1000 USD). However, in real world practice, this off-the-shelf device can not be used by typical users (smallholder farmers). Therefore, the study presents a tool that is cheap and user friendly. We present preliminary results and

performance of the tool is better than random however below performance of an industry
 Feedback  meter.

References

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Index Terms

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> Applied computing



Physical sciences and engineering

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