Smartphone based point-of-use determination of aflatoxin in peanuts

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SAFE-Phone

Smartphone based Aflatoxin Evaluation

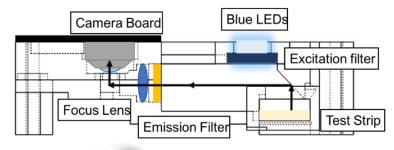
- 4' diagonal size, with a **touch screen**.
- Internet of Things operating system.
- Available to transmission data with Wi-Fi, Bluetooth, and 3G GSM networks
- Confocal fluorescence and visible optical sensor.
- Excite fluorescence image and capture immunoassay signals.
- Ultra-compact reader
- Europium nanoparticle and Gold nanoparticle based lateral flow assay.

TIDBIT ver. #1





TIDBIT ver. #2

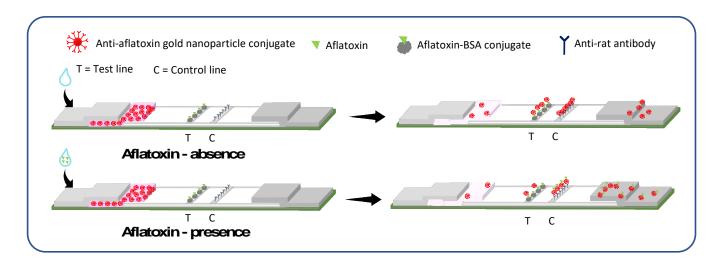




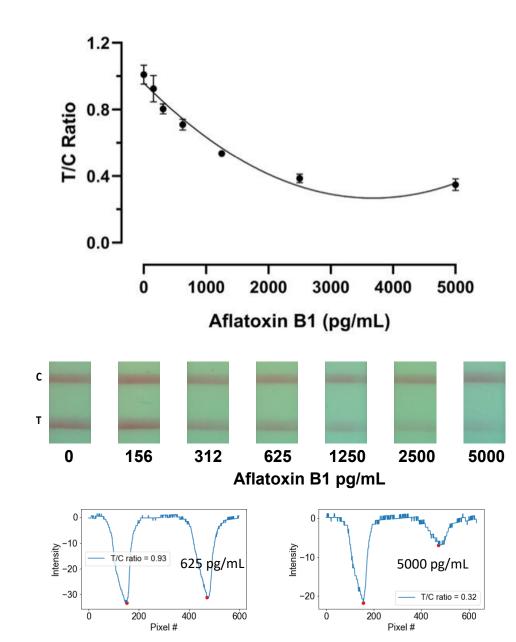




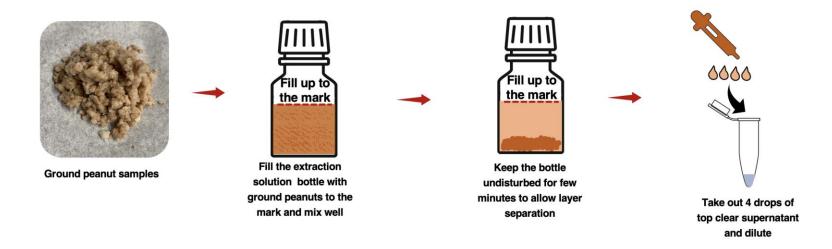
Aflatoxin B1 determination in peanut samples

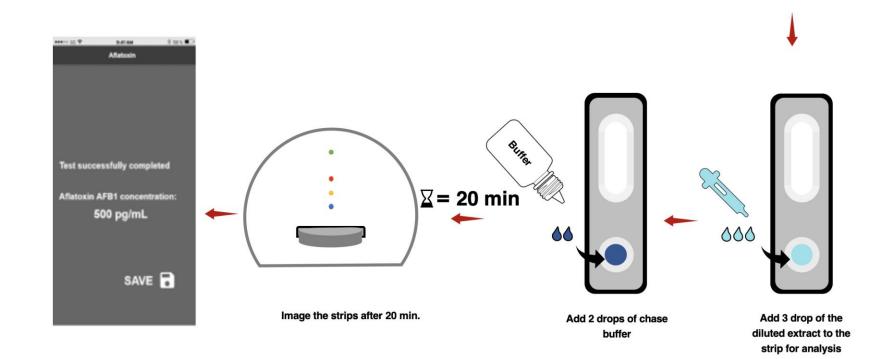


- Gold nanoparticle based lateral flow immunoassay.
- Assay covers the wide aflatoxin concentration range 300-5000 pg/mL.
- Limit of detection as low as 300 pg/mL
- Different batches of test strips were also analyzed to ascertain the interbatch variability



Steps for aflatoxin B1 determination in peanut samples





Acknowledgements









Wherever possible, the GAIN logo should be pri

colour on a white background. When used in co elements must be represented in Pantone 2010