

Application of botanical foliar spray on the control of fungal diseases of *Vigna radiata* (mung bean) in Uyo, South-South Nigeria

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Abstract:

A field trial was conducted at the University of Uyo Teaching and Research farm, Use-offot, during 2015 at various seasons to assess the fungicidal potentials of some plants as foliar sprays in the control of fungal diseases associated with (*Vigna radiata* L.) mung bean which include: *Cercospora* leaf spot caused by *Cercospora canescens* and *C. cruenta*, powdery mildew by *Erysiphe polygoni* and anthracnose by *Colletotrichum lindemuthianum*. Plants extracts that served as foliar spray in the control of these fungal diseases were: neem leaves (*A. indica*), tassel flower (*E. coccinea*), drum stick (*Moringa oleifera*), and candle stick (*S. alata*) with sterile distilled water was used as the control. The experiment was arranged in a Randomized Complete Block Design (RCBD) and replicated three times. The results obtained showed that *Moringa oleifera* performed the best in increasing growth (vine length), more than all other extracts. *Emilia coccinea* performed best in terms of pod increase per plant, while *Senna alata* enhanced yield (seed weight) and so the high biomass. The result also indicated that neem showed the most effective response in reducing disease incidence and severity of mung bean disease more than all other plant extracts used in this study.

Keywords:

Mung bean, Plant extracts, Diseases, Botanicals, Antifungal activity.