

**VARIABILITY OF *Corynespora cassicola* ISOLATES
FROM NON-TRADITIONAL RUBBER GROWING
AREAS**

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By

GAMA RALALGE PIUMI NILUNIKA UDAYASIRI

**Faculty of Animal Science and Export Agriculture
Uva Wellassa University**

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ABSTRACT

Corynespora leaf fall disease is the most destructive leaf disease of rubber in Sri Lanka and it is caused by *Corynespora cassiicola* (Berk and Curt). *C. cassiicola* on *Hevea brasiliensis* show a diversity of symptoms and it is a unique feature of this pathogen. Very recently a leaf fall disease has been reported from non-traditional rubber growing areas. Isolation of the diseased samples continuously resulted the *C. cassiicola* isolates. This was the 1st report of *C. cassiicola* from field plants of RRISL 121, one of the prestigious clones recommended by RRISL (Fernando *et al*, 2013 – Unpublished). The present study was carried out to identify the variability in morphological and reproductive characteristics and to assess the pathogenicity levels of different isolates. Five isolates of *C. cassiicola* obtained from traditional and non-traditional rubber growing areas were analysed by morphological characters and reproductive characters. Variability of morphological and reproductive characters was observed among the isolates in PDA and as well as other four medias (LBA, CDA, BA and MEA). The pathogenicity levels of the five isolates also showed significant variability on the clone RRIC 121. The *Hevea brasiliensis* clones RRIC 100, RRISL 201, RRIC 102, RRISL 211 were used in clonal screening to reveal different pathogenicity levels of the pathogen isolates. Variability in toxin production the clone RRIC 100 and RRISL 226 was measured using leaf wilt bio assay and leaf puncture bio assay methods.

Key words: Disease, Clone, Pathogen, Isolates, *Corynespora cassiicola*