Bioactive metabolites from endophytic fungi *Aspergillus niger*, *Biscogniauxia capnodes* and *Pestalotiopsis mangiferae*

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Endophytes are considered as an outstanding source of structurally diverse biological active secondary metabolites. In a continuation of our research studies on the search for bioactive compounds from endophytic fungi from Sri Lankan flora we have investigated the secondary metabolites produced by endophytic fungi *Aspergillus niger*, *Biscogniauxia capnodes* and *Pestalotiopsis mangiferae* isolated from the fruits of *Carica papaya*, *Averrhoa carambola* and *Syzygium samarangense*,respectively.Each fungus was inoculated in PDB media in Erlenmeyer flasks. After 21 days, the fungal media and the mycelium were extracted with EtOAc. Extracts were screened for antifungal activity,antioxidant activity, brine shrimp toxicity, phytotoxicity and α-amylase inhibitory activity. Chromatographic separation of combined extracts over silica gel, RP-silica gel, Sephedex LH-20 and PTLC furnished rubrofusarin B, aurasperone A, aurasperone D, carbonarone A from *A. niger*; reticulol, 6-*O*-methylreticulol, 5-methylmellein, 7-hydroxy-5-methylmellein from *B. capnodes*; fatty acids and ergosterol from *P. mangiferae*. Carbonarone A showed brine shrimp toxicity (IC_{50}, 97 ppm), phytotoxicity activity against *Lactuca sativa*(shoot inhibition IC_{50}, 32 ppm, root inhibition IC_{50}, 38 ppm) and high antifungal activity against *Cladosporium cladosporioides*at 62.5 ppm/spot. Reticulol showed moderate antioxidant activity while 5-methylmellein and 7-hydroxy-5-methylmellein showed weak antifungal and phytotoxic activities.

Keywords: *Aspergillus niger; Biscogniauxia capnodes;Pestalotiopsis mangiferae*