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Isolation and identification of some secondary metabolites from associated apple plant fungus *Aspergillus tubingensis*

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Filamentous fungi in the *Aspergillus tubingensis* (strain AN103) is a black *Aspergillus* belonging to the *Aspergillus* section Nigri, represent some of the most widespread food, fruits and feed contaminants known, but they are also some of the most important workhorses used by the biotechnological industry as study strain after it was isolated from golden delicious apple fields at Volga region, Saratov city, Russia. Black *Aspergilli* were found in 19 of 28 different apple stem samples, ranging from 10 to 45 colonies forming units per 10 cm stem surface. This species morphologically resembles *Aspergillus niger*. Among the secreted extract components, six dimeric naphtho-g-pyrones, named Fonsecain (1), Pyranopyrrol A (2), Rubrofusarin B (3), Citreonigrin E (4), Cyclopenol (5) and a New Asperazine Derivate (6) were isolated from apple associated endophytic fungus *Aspergillus tubingensis* (AN103) cultivated in solid rice medium. The fungal isolate (AN103) was morphologically characterized by performing cotton blue staining and molecular characterization performed by ITS1, 4 rRNA gene sequence analysis and it was confirmed as *Aspergillus tubingensis*. Fungal metabolites and their structures were elucidated by spectroscopic methods, including HPLC, LC-MS- and 1H-NMR.

Biography

Hassan Awad Ahmed Mohamed is a PhD student at Saratov State University, Russian Federation. He is Assistant Lecturer, Faculty of Science, Al-Azhar University, Egypt. He has already published and has attended several international conferences. Now, he is preparing to submit many publications in different journals related to Microbiology.

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