

## ABSTRACT

Khewra salt mines of Pakistan are known for extremely saline conditions that are highly favorable for salt loving microbiota, halophiles. This study was conducted with aim of isolation and characterization of halophilic/halotolerant fungi from this hypersaline environment. Soil, water, rocks and salt drippings were taken as samples from Khewra mine and its vicinity. Total 25 samples were collected and processed for growth out of which 6 samples did not show growth while 19 samples grew on high salt media. Isolates were purified and further characterized by macroscopic, microscopic, physiological and molecular characterization. Maximum salt tolerance range for isolates was 27% NaCl, pH 9 and temperature 30 °C. Gene sequencing of three isolates (FM2, FM8 and FM9) revealed that all these isolates belong to Ascomycota class, FM2 was closest to *Penicillium oxalicum* with 98% similarity, FM8 closest to *Phialosimplex* sp. with 99% similarity while FM9 closest to *Eurotium herbariorum* with 98% similarity.