CHENARI BOUKET, A., BABAEI-AHARI, A., BELBAHRI, L., TOJO, M., 2017: Morphological and molecular identification of a newly recovered *Pythium* species, *P. viniferum* from Iran, and evaluation of its pathogenicity on cucumber seedlings. – Austrian J. of Mycology 26: 51–61.

Key words: Biodiversity, Cucumis sativus, Mycobiota, Pythium viniferum. - Mycobiota of Iran.

Abstract: During a survey on the biodiversity of the genus *Pythium* in Iran, 12 isolates of *P. viniferum* were recovered from the rhizosphere of plant species from different locations and environments. The identification of *P. viniferum* was based on combination of cultural morphological characteristics, its cardinal *in vitro* growth rate, and sequence data from ITS-rDNA. Phylogenetic analyses of the ITS-rDNA sequences clustered our isolates with ex-type isolate of *P. viniferum* from GenBank. The species represents a new record for the mycobiota of Iran. We provide a full illustration of the species and compare its phylogeny and morphology with closely related species in *Pythium* clade F. Inoculation experiments indicated that it was capable of infection in cucumber (*Cucumis sativus*) seedlings.