



New distribution records of *Actiniopteris radiata* (Sw.) Link (Pteridaceae)

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Abstract

Scientific report on updating of new distributional record of *Actiniopteris radiata* (Sw.) Link (Pteridaceae) is identified by urban area of Sankarankovil, Tirunelveli district, Tamilnadu, South India in the during the study periods (September, 2018-October, 2018).

Keywords: *Actiniopteris radiata*, Pteridaceae, new records

REPORT

Pteridophytes are very ancient plants, which is early fern fossils predate the beginning of the Mesozoic era, more than about 360 million years ago. They are older than land animals and far older than the dinosaurs. Pteridophytes, which include ferns and lycopods, are spore-producing plants usually found in humid environments. They provide shelter and habitat for many small animals and play essential roles in soil erosion prevention, stream bank stabilisation, removal of pollutants from the environment and soil creation on barren habitats.

The Genus of *Actiniopteris* Link. belongs to the family Pteridaceae. Species of *Actiniopteris* species were growing in the mountainous regions, tropical and subtropical regions of the Old World within the African-Asian area [1]. In Southern Asia *A. radiata* spread in South West of Asia, in the Arabian Peninsula [2-5]. All the *Actiniopteris* species are xerophytes, they prefer dry habitats and could be found on dry slopes and in rock crevices at an altitude of 100 to 2700 m asl [6].

The study area of Sankaran kovil is situated at Tirunelveli District and 56 km away from Thirunelveli City and 30 km from west of Southern Western Ghats. During in the field trip to the Sankarankovil, observed that on the roadway of Puliyan kudi encountered in the interesting species

of *Actiniopteris radiata* (Sw.) Link (Pteridaceae). More than 10 colonies of *A. radiata* (Sw.) were grown on kovil buildings wall on the top regions.

New Locality and species examined: Sankarankovil, Tirunelveli District, Tamil nadu.

Locality: Google Earth: latitude: 9.170268°; Longitude : 531480°



Distribution view of species Photo: Fig.1a



Distribution view of species Photo: Fig.1b

Species description

Lithophytic herbs with erect, densely scaly, rhizome, 2 x 2.7 cm. Scales 2-5 x 0.3-0.7 mm, linear-lanceolate, dark brown in the middle, paler along margin, entire. Fronds 4-6 x 3-3.6 cm, simple, flabellate; stipe 8-10 cm long; lamina dichotomously lobed, lobes linear, 3-5 x 0.3-0.16 mm, lobed; fertile lamina narrower. Sori linear, marginal, covered by the reflexed margins of the pinnae lobes. Sporangial capsule 259 x 221 µm, subglobose, stalk 379 µm. Spores 68.5 x 56 µm, trilete, tetrahedral, rugulose to verrucate.

Global Distribution: India, Sri Lanka, United Arab Republic, Iran, Pakistan, Africa, Mascaren Islands, Iran and Afganistan.

Indian Distribution: Kerala: Palakkad and Idukki districts.

Tamil nadu: Kalakad Mundanthurai Tiger Reserve, Courtallam, Sivagiri, Ambasamuthiram and Manimutharoo.

New Distribution Area: Sankarankovil, Tirunelveli District, Tamilnadu.

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