calyx..."; de Wit (in Reinwardtia 3(4): 533-534. 1956) stated "...the calyx splits in Malaysian specimens in the upper part into two lobes, one consisting of two sepal-tops and the other of three. In some cases, the five tops become free." He felt that the dimorphism might be connected with the sexual nature of the flowers, but he had not been able to demonstrate that the shape of the calyx was correlated with the sex of the flower. He further stated, "It is just possible that in India the tops of the sepals become always free and that this is connected with the flowers being male, which is confirmed by a few specimens from India which I was able to examine". In the course of my study, I have observed that in the Indian specimens, the calyx is five-lobed in the upper part in the female flowers too. Thus, the shape of the calyx is not correlated with the sexual nature of the flowers.

In this connection, I would like to mention that fully developed male flowers are rarely found in herbarium specimens (see also de Wit in Reinwardtia 3(4): 533. 1956) because they remain attached to the pedicels just for a night and start falling from the next morning. Thus, during the flowering period, numerous fresh male flowers are found scattered under the tree, particularly in the morning hours.

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43. REDISCOVERY OF *CEROPEGIA EVANSII* McCANN, ASCLEPIADACEAE, FROM MAHARASHTRA

(*With one plate and one text-figure*)

Ceropegia evansii McCann (Asclepiadaceae) is an endemic and threatened plant species. The species is known to occur only from the hill ranges of the Western Ghats of Maharashtra i.e. Khandala and the neighbouring Sakarpathar-Ambavane range of Pune district (Ansari 1984, Jagtap and Singh 1999).

The species was first described by McCann from Khandala (1945). Santapau and Irani (1958, 1962) reported the species from the same hill ranges. The species was collected on July 27, 1964 by B.V. Reddi (93331) from Ambavane and deposited at the Botanical Survey of India (BSI).

About the occurrence, Santapau (1953) noted that the species is "one of the commonest of the *Ceropegias* in Khandala and is found abundant on the lower slopes below Duke's Nose."

The species has disappeared very fast from its type locality because of anthropogenic problems and habitat destruction. It has not been collected again from its type locality and other areas after 1964. This might be due to anthropogenic pressures and habitat destruction.

Ahmedullah and Nayar (1968) kept this plant under the rare and endangered category because of its localized distribution. In the RED DATA BOOK, Nayar and Sastry (1987) gave "vulnerable" status to the species. Almeida and Almeida (1990) have listed it as a threatened and endemic species. Singh and Karthikeyan (2000), Mishra and Singh (2000) have treated the species as critically endangered. According to the latter, the number of mature individuals in the wild is below 50. They have also reported that in 1997, a few plants were noted at Amba Ghat (Yadav, pers. comm.). Tetali *et al.* (2000) have treated it as vulnerable.

During routine botanical explorations, we have collected *C. evansii* from Rajgad, a hill fort, located in the Velhe taluka of Pune district in Maharashtra State (Fig. 1) at an altitude of 850 m. The present report is a rediscovery of *C. evansii* from a new locality other than

Tetali, P. *et al.*: *Ceropegia evansii* McCann PLATE 1



Fig. 1: *Ceropegia evansii* McCann
a. Habit; b. Inflorescence; c. Single flower; d. Vertical section of flower showing corona

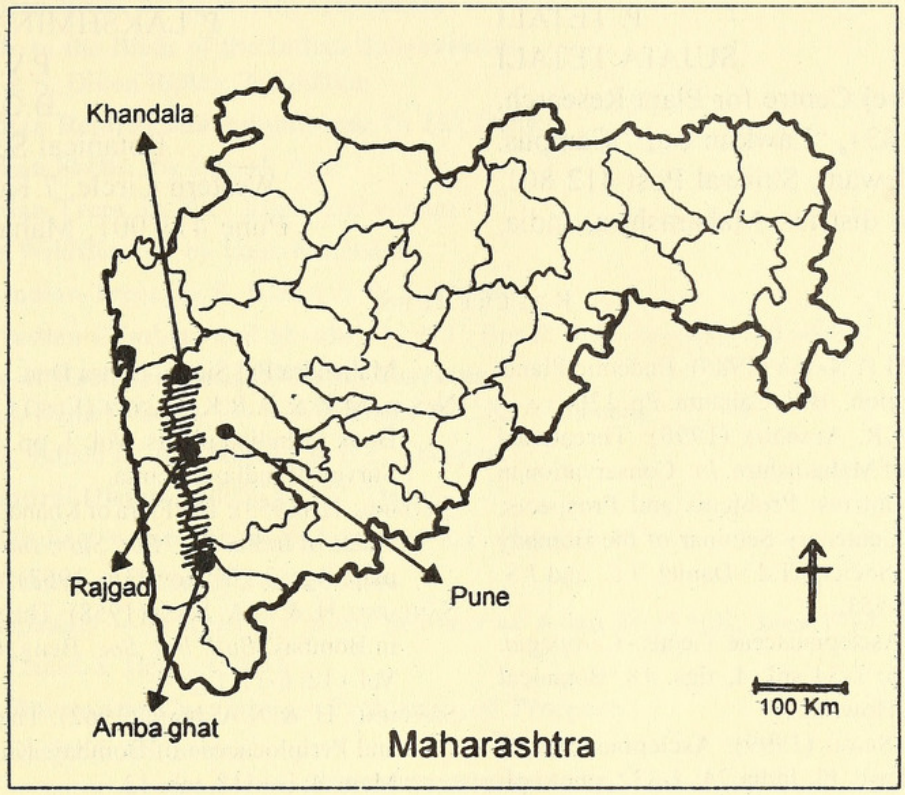


Fig. 1: Distribution map of *Ceropegia evansii* McC.

the Ambavane hill ranges (14.vii.2000 Tetali, s.n.).

We found only one individual in the entire locality, indicating extreme rarity of the species. The present collection site is 100 km away from, and southwest of the type locality.

The area where the specimen was collected is a degraded hill slope. The plant was found growing at the edge of a subtropical hill forest among *Lantana camara* and *Carissa congesta* bushes. The surrounding vegetation of the area is dominated by a gregarious shrub *Carvia callosa*. The area also seems to be the grazing ground for village cattle. Dozens of stray cattle were found grazing in the habitat. The cattle eat the entire plant. Cowherds and stray cattle appear to be a serious threat to the natural populations.

Information with regard to ranges in descriptions of certain morphological characters observed in comparison to the earlier description are as given below.

Twiners up to 3 m long (up to 2.7 m); petioles up to 2.5 cm long (up to 1 cm long); cymes consisting of few to many flowers, up to 13 (few flowered); peduncles up to 7.5 cm long (long *(sic)*); pedicels up to 1.3 cm long (up to 1 cm long); corolla 4.5 cm long (4 cm long). Various parts of the plant are shown in Plate 1 to facilitate identification.

The voucher specimens are deposited at the Herbarium, Botanical Survey of India, Western Circle, Pune (BSI), and Naoroji Godrej Centre for Plant Research, Lawkim Ltd. Campus, Shindewadi.

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