

Further confirmation for
Platyceps rhodorachis (JAN, 1865),
from India, with a note on feeding
on *Cyrtodactylus fasciolatus*
(BLYTH, 1861)

The snake genus *Platyceps* is represented by 15 species worldwide (UETZ & HOŠEK 2013), among them, *P. ventromaculatus* (GRAY, 1834), *P. ladacensis* (ANDERSON, 1871) and *P. rhodorachis* (JAN, 1865) were reported from India (KHAN 1997; WHITAKER & CAPTAIN 2004; DAS 2012). *Platyceps ventromaculatus* is rather distinctive in morphology and inhabits low elevation areas (WHITAKER & CAPTAIN 2004). *Platyceps ladacensis* and *P. rhodorachis* are closely related and the former was often regarded a subspecies of *P. rhodorachis* (ANDERSON 1896; LATIFI 1985; UETZ & HOŠEK 2013). Recently SCHÄTTI et al. (2013) described hybridization between *P. rhodorachis* and *P. karelini* in their common range.

Platyceps rhodorachis (JAN, 1865) is a species complex known for its high variability in color pattern throughout its distribution range (WERNER 1971; SCHÄTTI & SCHMITZ 2006). Its members are slender and agile snakes of up to 130 cm in length (SCHLEICH et al. 1996). Their biology is poorly known, apart from the fact that they are diurnal or crepuscular and inhabit extremely dry and rocky areas (AMR & DISI 2011). *Platyceps rhodorachis* has not yet been assessed for the IUCN Red List due to paucity of data.

Platyceps rhodorachis is reported from Algeria, Libya, Chad, Sudan, South-Sudan, Ethiopia, Saudi Arabia, Somalia, Iraq, Oman, Iran, Turkmenistan, Uzbekistan, Kazakhstan, Kyrgyzstan, Tajikistan and Pakistan (UETZ & HOŠEK 2013). In Pakistan, there are records from sea level to 2,300 m a.s.l. in the northern and north-western sub-Himalayas, Sulaiman and Kirther Ranges, Salt Range Tableland, Makran coast, Chitral, Dir and Swat regions (KHAN 1986, 1997; KHAN & KHAN 2000).

The southeasternmost localities mentioned for this snake species include Siwaliks in Kashmir and Uttar Pradesh in India and Nepal (KHAN 1997; SCHÄTTI & SCHMITZ 2006). However, KHAN (1997) did not provide precise data on the Indian specimen or locality and SCHÄTTI & SCHMITZ (2006) just discussed the alleged presence of *P. rhodorachis* in Uttar Pradesh. Thus, the only known authentic record of *P. rhodorachis* in this area refers to a specimen of *P. r. kashmirensis* (KHAN & KHAN, 2000) from Azad Kashmir, Pakistan (33° 30' N, 74° 00' E; 1,315 m a.s.l.; KHAN & KHAN 2000; UETZ & HOŠEK 2013). However, *P. rhodorachis* was not included in the faunal list of Himachal Pradesh by SAIKIA et al. (2007).

As part of a cumulative environmental impact assessment on hydroelectric projects along the Sutlej River Basin, undertaken by the Sálím Ali Centre for Ornithology and Natural History (SACON), Coimbatore, the authors surveyed for reptiles in Luhri, Himachal Pradesh (31° 20' 367" N and 77° 26' 121" E; 825 m a.s.l.) about 300 m off the road in the Sutlej River Basin on March 21, 2013. The area was rocky, devoid of thick vegetation, barring a

few *Eucalyptus* trees and shrubs and sparse grass. The region may have been covered by dry deciduous forests (CHAMPION & SETH 1968).

An individual of *P. rhodorachis* (total length ca. 95 cm; Fig. 1) was spotted at 15:22 h moving from one rock crevice to the other located about 3 m above ground. The snake was identified by its dorsal color pattern based on descriptions given in MINTON (1966), SCHÄTTI & SCHMITZ (2006) and UETZ & HOŠEK (2013) and comparison with photographs in UETZ & HOŠEK (2013).

The snake's movements were watched from about 8 m distance. At 15:24 h the snake tried to enter a rock crevice but suddenly turned back holding a gecko (total body length ca. 10 cm; Fig. 1) at the neck. The gecko was identified as *Cryptodactylus fasciolatus* (BLYTH, 1861) by its greyish-brown dorsum with a series of dark brown irregular edged bands extending up to tail according to the information in VASUDEVAN & SONDHİ (2010). This lizard is endemic to the western Himalayas (ANNANDALE 1914; VASUDEVAN & SONDHİ 2010) where it is known from the hills of Shimla (Subalhu), Kumaon, Almora (BLYTH 1861; ANNANDALE 1914; SMITH 1935) and Garhwal between 600 and 1,800 m a.s.l. (HUSAIN & RAY 1993).

The predatory act began at 15:24 h and lasted for about five minutes, during which neither of the animals emitted any sound. During the first four minutes, the snake did not try to swallow the prey; it firmly seized the gecko at the neck and remained motionless for approximately 80 seconds. In the beginning, the gecko wriggled for several seconds, while predator and prey were still perched on the rock. The snake kept the gecko immobilized holding its head and executed contraction movements with the body. After two minutes of continuous firm grasp by the snake, the lizard was flaccid, partially paralyzed (compare the mild toxic effect of the bite to prey animals described by PERRY 1988). The gecko never showed any defensive behavior such as tail display or autotomy. About 40 seconds later (15:26 h), the snake tried to crush/squeeze the head of its prey. After successive contortion, at 15:27 h the snake started ingesting the prey from the head, which took two minutes. The whole action took place on the rocks above the



Fig. 1: *Platyceps rhodorachis* (JAN, 1865) feeding on *Crytodactylus fasciolatus* (BLYTH, 1861) in the Sutlej River Basin, Himachal Pradesh, India.

ground. During three minutes subsequent to the swallowing, the snake entered and left four more crevices, presumably to find another prey, and then went out of sight.

The alleged report of SCHÄTTI & SCHMITZ (2006) along with the present confirmation of *P. rhodorachis* extends the known distribution range from Azad Kashmir (KHAN & KHAN 2000) to Luhri, Sutlej River, Himachal Pradesh, which is about 400 km in linear distance.

Platyceps rhodorachis is known to feed on fishes, toads (including tadpoles), lizards, snakes, birds and mammals (LEVITON et al. 1992; GALLAGHER 1993; SCHLEICH et al. 1996; JONGBLOED 2000; CUNNINGHAM 2001; MULDER 2002; AMR & DISI 2011); cannibalism was observed in captivity (CUNNINGHAM 2000).

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