

A note on feeding observation of Golden Langur on Water Hyacinth

The Golden Langur *Trachypithecus geei* Khajuria, 1956 is a rare and endemic colobine monkey found in a few forest patches of Assam, northeastern India and Bhutan, with its restricted distribution lying north of the Brahmaputra River, bounded on the east by Manas River, and on the west by Sankosh River (Chetry et al. 2010). It occurs in moist evergreen, dipterocarp, riparian and moist deciduous forest, and occasionally in degraded habitats with secondary growth (Srivastava et al. 2001). It is classified as Endangered in the IUCN Red List of Threatened Species (Das et al. 2008).

During the month of November 2019, we observed an interesting behaviour by a group of Golden Langurs on two occasions at Maachbhandar of Samokha River in Chirang Reserve Forest (26.763N, 90.284E), Assam, India. The surrounding habitat of the langur group was full of shrubs, climbers, woody plants, and river flowing through, harbouring the deadly invasive aquatic macrophyte, Water Hyacinth *Pontederia crassipes*, which is located in this part of the reserve forest only. Maachbhandar is a large wetland inside Chirang Reserve Forest (BirdLife International 2020), which is an oldest part of Manas Biosphere Reserve in Assam (Bhattacharjee et al. 2014) and recognized as a buffer area of the Biosphere Reserve and Ripu-Chirang Elephant Reserve (Das et al. 2013). This historical reserve forest comprises of dense tropical semi-evergreen, tropical moist deciduous and riverine forests along with small patches of woodland and grassland (BirdLife International 2020).

A group of Golden Langurs (consisting of 1 adult male, 2 adult females and 3 sub-adults) were observed feeding on the tender petiole base of Water Hyacinth. They specifically fed only on the base of petiole out of the whole plant. The female langurs descended with the support of climbers, got hold of the whole plant and jumped back to the tree canopy


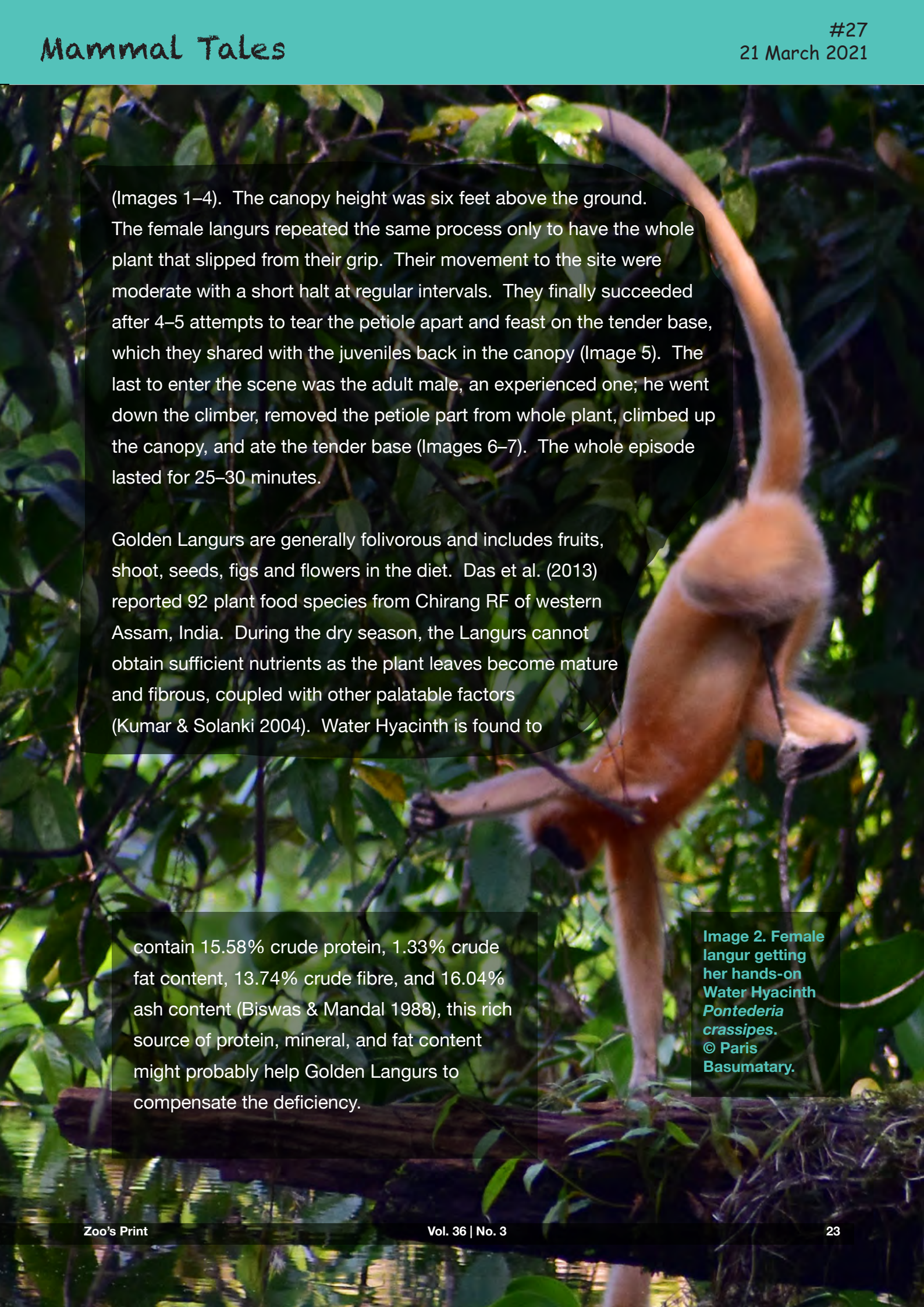


Image 1. Female Golden Langur *Trachypithecus geei* eyeing the feeding site. © Paris Basumatary.



(Images 1–4). The canopy height was six feet above the ground. The female langurs repeated the same process only to have the whole plant that slipped from their grip. Their movement to the site were moderate with a short halt at regular intervals. They finally succeeded after 4–5 attempts to tear the petiole apart and feast on the tender base, which they shared with the juveniles back in the canopy (Image 5). The last to enter the scene was the adult male, an experienced one; he went down the climber, removed the petiole part from whole plant, climbed up the canopy, and ate the tender base (Images 6–7). The whole episode lasted for 25–30 minutes.

Golden Langurs are generally folivorous and includes fruits, shoot, seeds, figs and flowers in the diet. Das et al. (2013) reported 92 plant food species from Chirang RF of western Assam, India. During the dry season, the Langurs cannot obtain sufficient nutrients as the plant leaves become mature and fibrous, coupled with other palatable factors (Kumar & Solanki 2004). Water Hyacinth is found to

contain 15.58% crude protein, 1.33% crude fat content, 13.74% crude fibre, and 16.04% ash content (Biswas & Mandal 1988), this rich source of protein, mineral, and fat content might probably help Golden Langurs to compensate the deficiency.

Image 2. Female langur getting her hands-on Water Hyacinth *Pontederia crassipes*. © Paris Basumatary.



Image 3. Female langur with whole plant of Water Hyacinth. © Paris Basumatary.



Image 4. Female langur goes up to the canopy. © Paris Basumatary.



Image 5. Female langur sharing the fare with sub-adult. © Sinaiti Dwimary.



Image 6. Adult male Golden Langur with torn petiole part of Water Hyacinth. © Sinaiti Dwimary.

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Image 7. Adult male langur feeding on the tender petiole base of Water Hyacinth *P. crassipes*. © Sinaiti Dwimary.

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