

Before proceeding to the consideration of these species, something may here be said as to a remarkable peculiarity which may often be observed in both the Three-toed and Two-toed Sloths. This is the curious green shade with which their brownish or greyish fur is often tinged, especially on the back and nape—a colour which has nothing in common with the metallic gloss which is so striking in some of the Insectivores, being a distinct greyish green, not unlike that of the foliage of the olive-tree. This colour, as Dr. Seemann observes*, fades considerably in dried skins; and it is also observed to diminish rapidly in brilliancy in individuals which are kept in captivity in Europe. My friend Mr. H. C. Sorby has at my request investigated this interesting phenomenon both with the microscope and spectroscope; and he finds that it is caused by the presence of multitudes of small green algæ, very similar to the common *Chlorococcum*, which are found on the surface of the hairs in every stage of development. In *Bradypus*, Mr. Sorby tells me, the algæ are generally spread over the loose pith-like outer surface of the hairs, while in *Choloepus* they are confined to the deep depressions which separate the clean solid ribs by which each hair is fluted. Mr. Sorby's observations, I trust, will soon be communicated in full to the Linnean Society; and I would here merely draw attention to a very curious fact in mimicry, namely that in this case a vegetable parasite is of direct benefit to its animal host. Various travellers have remarked on the protection afforded to the Sloths by their greenish coloration, which harmonizes so well with the foliage of their native forests; and we now find that it is due, not to any peculiarity of the animal's organization, but to the direct assistance of the parasitic *Chlorococcum*.

1. *Bradypus infuscatus*.

Bradypus infuscatus, Wagler, Isis, 1831, p. 611 (descr. orig.)¹.

Arctopithecus griseus, Gray, P. Z. S. 1871, p. 446, pl. xxxvi. (descr. orig.)²; Hand-list Edent. &c. Mamm. p. 5³.

Hab. PANAMA (*Mus. Paris*), Cordillera del Chucu, Veragua (*Arcé, Mus. Brit.*²).—SOUTH AMERICA to Peru and Brazil¹.

As already observed, I am unable to recognize Gray's *Arctopithecus griseus* as a distinct species. The colour of the fur of the type specimens is pale, but not more so than that of some South-American examples; and no trust can be placed in the form of the mandibular angle, which, moreover, is evidently imperfectly ossified in the young skull described and figured by Gray.

Bradypus infuscatus was first described by Wagler from a specimen brought home by Spix, and appears to replace *B. tridactylus* (if it is really distinct) in the north-western regions of South America. It has been found in Northern Brazil, Bolivia, Peru, and Ecuador, whence its range doubtless extends through Colombia to the State of Panama; for the British-Museum specimens ascribed to "Costa Rica" by Gray are

* *Infra*, p. 184.