

Manuscript Number: 3178 NAAS Rating: 4.96

Study of Seed Dispersal by the Indian Sloth Bear (*Melursus ursinus*) in Nawada Forest Division, Bihar (India)

Gourav Kumar and Dilip Kumar Paul

Environmental Science and Management Department of Zoology, Patna University, Patna-800 005 India *E-mail: dkpaul.pat31@gmail.com

Abstract: Sloth bears (*Melursus ursinus*) are mainly myrmecophagous, but in the present study, fruit seeds were found in 40 scats and 25 scats of sloth bear collected during summer and monsoon respectively in Nawada Forest Division, Bihar, India. Seeds of three of four plant species collected from scats germinated faster than seeds not passing through bears. Seeds of fleshy fruit species were found intact in the scats of sloth bear. In the summer season, scats were dominated by seeds of *Syzygium cumini* (family Myrtaceae), *Cassia fistula* (family Fabaceae) and *Mangifera indica* (family Anacardiaceae). In the monsoon season, fruits were less frequent in scats but those of S. *cumini, Buchanania lanzan* (family Anacardiaceae) predominated. Maximum seed germination was observed in *S. cumini* (84%), followed by *B. lanzan* (70%), *C. fistula* (58%) and *Mangifera indica* (48%). However, the seed germination time was significantly different in both unpassed and passed seeds of those plant species except *Cassia fistula* species. These results suggest that the sloth bear may play an important role in the population dynamics of fleshy-fruited species of the region.

Keywords: Melursus ursinus, Sloth bear, Seed dispersal, Scat analysis, Nawada Forest Division, Bihar