

Prevalence of ocular problems among captive Asian Elephants of Kerala

G. Ajitkumar*, P.M. Hari Narayanan, Sreejith Radhakrishnan, David Abraham and P.C. Alex

Kerala, the southern-most state in peninsular India, possesses a large captive Asian elephant population, which is mainly utilized during temple festivals. Even though most of them are cared well, there are reports of ill-treatment once in a while. Many animal lovers have raised concern over the increasing occurrence of eye disorders among captive elephants in Kerala. This might be due to mismanagement or injuries inflicted during work or transport. In a detailed study extending over two decades, Chandrasekharan *et al.* (1995) recorded 55 cases of corneal opacity among captive elephants of Kerala. According to McGaughey (1965), discharge from the eye, whitish patch or ulcer on the cornea and defective vision were the common symptoms noticed in elephants with corneal opacity. Chandrasekharan *et al.* (1995) opined that corneal opacity was more among elephants brought to Kerala from northern states than native elephants and the reasons were primarily vitamin A deficiency and injury. Opacity of cornea as a consequence of pox was also noticed in one elephant.

In order to estimate the prevalence and nature of various ocular problems in captive elephants of Kerala, a study was carried out in and around Thrissur district of Kerala. By close monitoring of 100 randomly selected elephants owned by temple trusts and private individuals, the vision as well as the existence of gross eye lesions was checked. Personal interview of mahouts and elephant owners were also carried out to gather as much detailed information as possible on these aspects. The data obtained were compiled, analyzed and summarized in Table 1.

Out of the 100 elephants surveyed, both eyes were normal in 80%. In 86% of elephants, the left eye was normal and in 84 percent, the right eye was normal. Six percent of elephants had corneal opacity of both eyes; five percent each had corneal opacity of right or left eye only (Fig. 1). One animal had cataract in left eye, and two had cataract in right eye (Fig. 2). Two percent were confirmed to be blind in the right eye and one, in both eyes. Three percent had purulent ocular discharge from one or both eyes.

References

- Chandrasekharan, K., Radhakrishnan, K., Cheeran, J. V., Nair, K. N. M and Prabhakaran, T. 1995.** Review of incidence, etiology and control of common diseases of Asian elephants with special reference to Kerala, pp. 439-449. In: Daniel, J.C. and H. Datye (eds.). *A Week with Elephants: Proceedings of the International Seminar on Asian Elephants*. Bombay Natural History Society.
- McGaughey, C. A. 1965.** Diseases of elephants – Part VI. Diseases of the eye. *Ceylon Vet. J.* 12(1): 7-9.

Table 1. Prevalence of eye affections among captive Asian elephants of Kerala

Serial No.	Condition	No. of elephants affected		
		Left eye	Right eye	Both eyes
1	Normal eyes	86	84	80
2	Corneal opacity	5	5	6
3	Cataract	1	2	-
4	Blindness	-	2	1
5	Purulent discharge	3	3	3



Figure 1. Corneal opacity



Figure 2. Cataract

Elephant Study Centre, Kerala Agricultural University, Mannuthy, Thrissur, Kerala 680651
Email: *ajitvet@yahoo.co.in