

search in a business organization forfeits academic freedom; even the most liberal organization restricts the freedom. Jayaraman is certainly availing the academic freedom unthinkable in a similar US scientific organization, and

the signed statement smacks of a propaganda.

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Editors' note: All correspondence in Current Science is submitted by the authors. The 'Editors' note' referred to above was to minimize a long explanatory preface on the origins of the signed statement.

Election fever versus scientists' anguish

In the past three weeks, the scientific community and laity have been agitated by the high-handed and difficult-to-understand behaviour of the union ministry of social justice and the animal welfare board in confiscating experimental monkeys at National Centre for Laboratory Animals (NCLAS), in Hyderabad. This centre works under the administrative control of the National Institute of Nutrition (NIN), a flagship laboratory of over 80 years standing under the Indian Council of Medical Research (ICMR). What is even worse is the delay in granting registration to this centre which is one of the best animal facilities in the country, and which has done a lot to promote laboratory animal science and laboratory animals welfare. As a person who was in charge of this centre and associated with its modernization process, I am greatly concerned, confused and anguished, about what is happening. Concerned, because animal experimentation is an important component in medical research, and NCLAS is a premier centre for supply of standardized, disease-free animals to government, university and private institutions all over the country. For the past two months the work of NCLAS has come to a grinding halt and with that, work at many other institutions which rely on NCLAS for supply of small laboratory animals. The loss in terms of money and under-utilization of human resource at NCLA and other research institutions and waste due to interrupted experiments, runs into crores. I am confused because, the number of smaller and less equipped animal facilities including those that applied for registration after NCLAS did, have been granted registration. NCLAS is being denied saying their application did not reach the ministry in time. This indeed in an unfortunate case of error of

omission rather than that of commission and that too not by NIN, but due to some administrative lapse at the level of ICMR (I am told) in New Delhi. The fact that several earlier applications from NCLAS in the format earlier stipulated are pending with the ministry is being forgotten. Rules keep changing and scientists do get confused and make errors. Strangely, at least one other Institution which applied after the last date has got the registration. In a bureaucracy-centred country, administrative lapses by government officials cannot be questioned but those by scientists must be punished in the most unreasonable way.

NCLAS also runs training programmes and publishes newsletters to ensure proper and humane use of laboratory animals for research and testing, and has struggled hard for the three 'Rs' – Refinement, Replacement and Reduction in animal science. Refinement at all levels in laboratory animal experimentation (housing, environment, and experimental techniques) results in more humane use of animals, more reliable results and reduction in the number of animals needed for research. Alongside is the attempt to replace laboratory animals with *in vitro* techniques. But the scope for this is limited because eventually trials and testing have to be at the level of whole animals before human beings.

The Department of Biotechnology Government of India, along with the Indian Council of Medical Research has spent large sums of money in the past 15 years to modernize the animal facility at NCLAS, and the staff of this centre is very knowledgeable and highly dedicated. Housing of animals meets strictly the internationally prescribed standards. I recall a symposium that NIN-NLASC (at that time known as

Laboratory Animals Service Centre) held jointly with Animal welfare board and Blue Cross in September 1993. My first question to them was: 'are you against all types of animal experimentation or want humane experimentation?' Their answer was, they are not against animal experimentation. They visited the facility and were basically satisfied and I recall feeling happy and satisfied after that symposium that some one was talking our language. The monkey facility was not up to the mark at that time but since then, a big cage for gang housing has been constructed and monkeys released for play and exercise in that. For conducting experiments, monkeys have to be kept in individual cages and those cages are of prescribed international standard. I also recall that at a subsequent international symposium held at NIN in September 1994, an expert in animal behaviour, J. M. Irwin from USA observed the monkeys in the gang cages as well as experimental cages and told me that they were remarkably well – physically and psychologically.

Yet for whatever reasons the animal activists have confiscated the monkeys. Assuming for a moment that some improvement is needed, is this an excuse to interrupt an important experiment involving a drug and stop all other activities involving smaller animals about which there is no complaint? For instance, will the Indian army stop fighting because it is not well-equipped and jawans are at greater threat of losing their lives? War against disease may not be as dramatic, but it is very important because disease kills innocent people who cannot fight the war against disease. It is true that multinational drug companies have better facilities and outwit Indian companies which are trying to help the nation by bringing out

cheaper drugs. Are acts such as this in the spirit of Swadeshi to which this government is committed? The monkeys that were taken away were very humanely used, for an important drug trial, and now all the effort is lost. Surely someone is having the last laugh. In the meantime, people are asking uncomfortable questions about the motives, that too with elections so close.

Having achieved their objective of setting the monkeys free in the forest, should the government not give the registration for the small animal facility at least so that scientific work can go on? A bureaucratic explanation will certainly be available for that also. Earlier, forest department officials had told NIN that they were not in favour of releasing monkeys used to captivity, but later they changed their mind and went

along with the animal welfare board and Blue Cross officials. Being a government organization, NIN could not mobilize the court though many people advised them to do so.

The fear among the scientists is that now in election fever, the plight of scientists will be forgotten, unless public realizes the injustice that is being done and speaks up. I used to be and still am very appreciative of the efforts of Maneka Gandhi, for creating public awareness and love for animals and used to watch her programme 'Menaka's Ark'. Perhaps Mrs Gandhi should herself visit NCLAS and satisfy herself. That way she will do service to her own image, the cause of health science in the country, and laboratory animal welfare in general. By stifling and demoralizing one institution that has done so much to

improve animal experimentation in the country and for animal welfare in general, who is gaining? The need of the hour is to refrain from taking rigid postures, but act in the best interest of the nation. There has to be social justice for the people and the scientists of this country. Priorities have to be right. Human welfare is as important (if not more) as animal welfare. The definition of cruelty to animals given in the Prevention of Cruelty to Animals Act and for which animals can be confiscated does not include laboratory animal experimentation of the kind done at NCLAS.

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Lesser dog-faced fruit bat in Southern India

Balasingh *et al.*¹ have recently reported a collection of 26 specimens ('a few bats') of the lesser dog-faced fruit bat, *Cynopterus brachyotis* (Mammalia: Chiroptera:Pteropodidae), from a Tiger Reserve area in Tamil Nadu. They claimed that it was a little-known and very poorly studied species and attempted to show that something very rare had been collected, with the result that *Current Science* provided them a full page and cover too.

The fact is that they have neither consulted the latest world catalogues^{2,3} nor have they tried to refer to any recent Indian work. They have consulted only two publications, a book on Malaysian fauna and a short list of merely two pages on the Indian subcontinent bats by two foreign workers, who might have had little access to Indian specimens and/or literature.

It may be noted that the Indian bat fauna is presently known by 110 species in 36 genera and 6 families. A number of significant studies have been made by Indian scientists like H. R. Bhat, A. Gopalakrishna, M. K. Chandrashekar and their coworkers, at Pune, Nagpur and Madurai, respectively, besides H. Khajuria, V. C. Agrawal, Y. P. Sinha

and P. K. Das of the Zoological Survey of India. The animal group is thus, not 'poorly studied'.

C. brachyotis has already been reported from all four states of southern India (Andhra Pradesh, Karnataka, Tamil Nadu and Kerala), besides Goa^{4,5}. This species is well represented in south and south-east Asia. Its South Indian and Sri Lankan population, after which the subspecies is named *ceylonensis*, is distinct and well distinguished from the other Indian species, *sphinx sphinx*. Incidentally, Balasingh *et al.* have not mentioned the subspecies of their collected specimens, when the subspecies category is much recognized in this animal group. Secondly, no species of Indian bats is either threatened, vulnerable or rare and as such not included in the *Red Data Book*⁶.

1. Balasingh, J., Ronald, J., Thiruchenthil Nathan, P. and Suthakar Isaac, S., *Curr. Sci.*, 1999, 76, 1542.
2. Honaki, J. H., Kinnman, K. E. and Koeppl, J. W., *Mammalian Species of the World*, Association of Systematic Zoology and Allen Press, Lawrence, Kansas, 1982.
3. Corbet, G. B. and Hill, J. E., *A World List of Mammalian Species*, 2nd edn,

British Museum (Natural History), London, 1986.

4. Agrawal, V. C., *Rec. Zool. Surv. India*, 1973, 67, 261-280.
5. Das, P. K., *Rec. Zool. Surv. India*, 1986, 84, 259-276.
6. *The Red Data Book on Indian Animals, Part I: Vertebrata*, Zoological Survey of India, Calcutta, 1994, p. 534.

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Response

We reported the occurrence of *Cynopterus brachyotis*, for the first time, in Kalakad Mundanthurai Tiger Reserve of Western Ghats (*Curr. Sci.*, 1999, 76, 1542). This is a common frugivorous bat species found in Southeast Asia and we do not claim it to be a 'rare' species. We captured a 'few bats' (a total of 26) at 4 different places on 6 different nights. Presence of short forearm (< 70 mm) and ear (< 18 mm) and absence of tragus, noseleaf and white ear margin in fresh adult specimens con-