blocks the synthesis of thymidine by inhibition of thymidylate synthase. As expected, exogenous folic acid and thymidine prevent the morphological aberrations caused by folic acid analogues and FUdR in *Drosophila*[37]. Keeping the above findings in view, it would be perhaps interesting to investigate the effect of folic acid, thymidine and methionine on VAL-induced wing abnormality in *Drosophila*.

The mechanisms or sites of action, initial biochemical effects and cellular receptors involved in the toxicity and teratogenicity of the AEDs are largely unknown[2,5,7,38]. An increased understanding of the mechanisms underlying the toxic and teratogenic effects of these drugs could be gained by studying the molecular basis of direct effects of the parent compounds or their metabolites on specific cell types at various stages of development. Given the status of *Drosophila* as one of the most well studied eukaryotes, our results indicate that *Drosophila* might provide a better opportunity for the same. Earlier studies on the developmental toxicity of cycloheximide, vinblastine, ethanol and other teratogens have indeed suggested that the fruit fly is sensitive to mammalian teratogens and that it may be of value in the study of teratogenic effects[21]. The mechanism of teratogenesis is of fundamental importance to the fascinating new area of developmental ecology. Till recently, details about how teratogens work were lacking. We are now at least beginning to have some candidates such as alcohol and valproate[39]. *Drosophila* seems to hold a potential to serve as a model not only for studies involving known/suspected teratogens but also for testing novel compounds/drugs for teratogenic activities.

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ABHAY SHARMA
SUSHIL KUMAR

Genetic Resources and Biotechnology Division,
Central Institute of Medicinal and Aromatic Plants,
Lucknow 226 015, India

Scent marking in the Asiatic lion

Schaller[1] first brought to the notice of scientists the scent marking of tiger. It is generally accepted that this fluid sprayed upward and backwards while in a standing posture and with the tail erect[1] is a source of pheromones[2]. This aspect has been later studied by McDougal[3], Jackson and Hillard[4] and, Schaller[5] in the tiger, snow-leopard and the African lion, respectively. Brahmachary *et al.* also studied the marking fluid of the tiger[6–9] and Poddar-

Table 1 *a*. Modalities of ejection of marking fluid in the Asiatic lion

Total no.	Upward only	Upward to downwards	Downwards		Horizontal
			Vertically	At an angle	
175	0	52	53	6	64

Table 1 *b*. Comparison of modalities of marking fluid ejection by several cats

Cat species	Modality of marking	Gender bias
Asiatic lion	Highly flexible, up to down, vertically down, horizontally backwards	Predominantly male activity
Tiger	Upwards	Marking frequency high in both sexes
Cheetah	Jerks up to down or vice versa	Predominantly male activity
Leopard	Upwards	–
African lion	Upwards but details not known	Predominantly male activity

Sarkar and Brahmachary[10], that of the cheetah.

In this note we report a distinctive feature of the marking behaviour of the Asiatic lion which may be compared with that of some other big cats. A lion and a lioness in an enclosure in the interpretation zone, Gir National Park, were first observed. It was noticed that like the African lion[5], marking in the Asiatic lion is a predominantly male activity. Later, a second lion was observed in the same setting and the different modalities of marking were now meticulously recorded for this animal (Table 1 *a*).

It is evident that unlike the tiger[6,7] and leopard[11], the Asiatic lion enjoys a very flexible modality of squirting marking fluid; not one was purely upwards as in the case of tigers, 52 started upwards but switched over to downwards rather like cheetah[10], 64 were horizontal, backwards spray, while 39 struck downwards (33 vertical and 6 at an angle).

The comparative study (Table 1 *b*) may be of interest for comparative ethology.

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R. L. BRAHMACHARY
M. SINGH*
MANISHA RAJPUT*

21B, Moti Jheel,
Calcutta 700 074, India
**Gir National Park,*
Sasan-Gir 362 135, India

The devastating landslide of August 1998 in Ukhimath area, Rudraprayag district, Garhwal Himalaya

It was a week of disaster from 11 to 19 August, 1998 in the Ukhimath area in Garhwal Himalaya. The landslides affecting 20 km^2 area occurred in two phases along the lower catchments of the Madhmaheswar and Kaliganga rivers. The study area lies between 79°03' to 79°09'E longitudes and 30°35' to 30°35'N latitudes, in the Great Himalaya. The northern extent of the landslides is seen from the confluence with the Mandakini River up to Lenkh in the Madhmaheswar valley, and up to Khunnu (Kotma) in Kaliganga valley.

The landslides occurred in the vulnerable Main Central Thrust zone (Figure 1) characterized by continued minor and periodic major seismic events, highly crushed and pulverized rocks, fans and cones of loose debris on steep slopes, seepages in linear belts and deforestation together with increased road-building activity. The landslides were triggered during heavy rains, but the controlling factors were geological structures, relief, surface cover of loose debris and unscientific road construction[1]. The first event occurred on 11/12 August 1998 throughout the area. On 18/19 August 1998 following high-intensity incessant rainfall in Madhmaheswar valley, villages Bhenti (on the left bank) and Pundar (on the right bank) went down in ruin and the flow of the Madhmaheswar river was blocked for about 12 h due to the forming of a debris dam. Later the dam breached, leaving behind a 1.2 km long, 50–70 m wide, and 25–30 m deep lake in the valley.

The losses assessed by the local administration are: 101 human lives, 422 heads of cattle, 820 houses and 411.55 ha of agricultural land, the aggregate amounting to Rs 41 million. In all 29 villages, 9752 people were affected. The roads were maximally damaged, mainly along Ukhimath–Mansuna–Jugasu, Guptkashi–Kalimath–Kotma and Guptkashi–Kedarnath segments. The suspension bridge at Jugasu