

Pollinating Insects of *Prosopis cineraria* Macbride

D R Parihar and Satya Vir

Central Arid Zone Research Institute, Jodhpur — 342 003 India

Prosopis cineraria is only desert leguminous tree which borne flowering and fruiting during the extreme dry months (March to May) and grows well against all the odds of climatic conditions, particularly temperature and relative humidity. The flowers are entomophilous and hence the rate of seed setting is largely dependent on insects.

The present study was undertaken to collect detailed information on the pollinating insects, as there was no information on this particular aspect. Observations were recorded on 9-20 year old trees located at Central Research Farm, CAZRI, Jodhpur, during the flowering season. Since the insect activity was more during morning, observations were recorded from 8 to 10 AM only after the collections made by using an insect collecting net with a long handle. The collected insects were later sorted out into genera and species and were confirmed taxonomically by CAB, International In-

stitute of Entomology, London. Details of the insects, their feeding habits and percentage presence per 50 sweeps are given in Table 1. Thirty one species of insects belonging to the orders; Hymenoptera (13), Diptera (8), Coleoptera (3), Lepidoptera (3) and Hemiptera (4) were identified. The most dominant insect species was *Apis florea* Fabricius which comprised 11.5% population. The bees were active collectors of pollen and worked consistently for about 2 to 4 minutes on the same spike. The movements of the bees were clockwise and not observed during noon possibly due to high temperatures. This was followed by dipteran flies muscidae and otitidae, anthomyliidae, sariophagidae, ephyridae, calliphoridae covering 2.2 to 4.2% population on the flowers. The lepidopterans and hemipterans have only 1.5 to 2.3%, while the coleopterans varied from 1.2 to 1.5% of the total population of insects.

Table 1 Insect pollinators, their feeding habit and population on flowers of *P. cineraria*

Family	Common name	Scientific name	Feeding habit	% of total insect population
Hymenoptera				
Torymidae	Chalcid	<i>Megastignum</i> sp.	Parasite, nectar and pollen feeder	4.7
	Chalcid	<i>Microdontomerus</i> sp.	—do—	3.3
Ormyridae	Gallparasite	<i>Ormyrus</i> sp.	Larval parasite, nectar and pollen feeder	4.2
Apidae	Honeybee	<i>Apis florea</i> Fabricius	Nectar and pollen feeder	11.5
Stephenidae	Larval parasite	<i>Neosterpharum</i> sp.	Nectar and pollen feeder	3.3
Eulophidae	Chalcid	<i>Chrysonotomyia</i> sp.	Larval Parasite and pollen feeder	4.2
		<i>Calliphoria</i> sp.	Visit to flower	8.2
Anthophoridae	Cuckoo bee	<i>Braunsapis</i> sp.	Pollen carrying bees	6.2
Halictidae	Solitary bee	<i>Halictus</i> sp.	Social bees, visit to flowers	2.2
	—do—	<i>Nomioides variegata</i> Olivier	—do—	3.2
	—do—	<i>N. cerea</i> Nurse	—do—	2.8
	—do—	<i>N. Punjabensis</i> Cameron	—do—	2.2
	—do—	<i>Nomioides</i> sp.	—do—	2.5
Diptera				
Muscidae	House fly	<i>Musca domestica</i> Linn.	Pollen and nectar feeder	4.2
	Bush fly	<i>M. Sorbens</i> Wiedemann	—do—	3.2
Otitidae	Slender fly	<i>Physiphora clausa</i> (Macquart)	—do—	3.1
	—do—	<i>P. alceae</i> Preyssler	—do—	2.2
Anthomyiidae	Dung Fly	<i>Delia platura</i> sp.	Visit to flower	2.2
Sariophagidae	Flesh Fly	<i>Multogramming</i> sp.	—do—	2.5
Ephyridae	Grey Fly	<i>Scatella</i> sp.	—do—	2.2
Calliphoridae	Blue Fly	<i>Rhycomya nigripes</i> Seguy	—do—	2.5
Coleoptera				
Burprestidae	Stem borer	<i>Anthaxia</i> sp.	Scrapping, chewing pollens and nectar feeder	1.2
Dermestidae	Carpet beetle	<i>Pharadonoma nobile</i> Reitter	—do—	1.5
	—do—	<i>Anthronus aegyptica</i> Pic	Visit to flower	1.5
Lepidoptera				
Hesperiidae	Skipper butterfly	<i>Pelopias mathias</i> Fabr.	Pollen and nectar feeder	2.3
Lasiocampidae	Eggar	<i>Taragama dorsalis</i> walker	—do—	2.2
	—do—	<i>Euchryaops</i> sp.	—do—	2.1
Lycaenidae	Blue butterfly	<i>Ascalenia</i> sp.	Nectar and pollen feeder	2.5
Hemiptera				
Miridae	Plant bug	<i>Campylomma</i> sp.	Leaf sap pollen feeder	2.5
Coreidae	Leaf footed bug	<i>Omanocoris</i> sp.	—do—	2.1
Cicadellidae	Leaf hopper	<i>Macropsis</i> sp.	—do—	1.5

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