References

- ANONYMOUS, 1983, Sorghum insect identification Hand book. *ICRISAT*, *Information Bulletin*, 12: 124 P.
- ATANASOV, K. H.,1978, Damage by the rust red-flour beetle to stored grains and its products. *Restitelna Zashehita*, 26: 19–20.
- OROZCO, F. AND FLUENTES, M.C., 1970.
 The influence of various factors on oviposition by *Tribolium castaneum*,
 I. Influence of temperature on oviposition and development. *Anales institute Nacoing de investigations Agronomicas*, 19: 135–149.

- PRUTHI, H.S. AND SINGH. M., 1950, Pests of stored grain and their control. ICAR., New Delhi, 88 P.
- PUNJI, G. K., 1976, Dietry efficacy of Natural foods for the growth and development of *Tribolim castaneum* Hbst. and Corcyra cechalonica Staint. Bulletin of Grain Technology, 5: 209-213.
- RIPA, S. R., 1975, Binomics of three coleoptera that attacks stored grain (Tenebrionidae, Cucujidae, Bostrychidae). Estacion, Experimentala Ig palma, Quillota, Chile.

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A Survey on the Colony Distribution of Rock Bees, Apis dorsata Fab. on Different Colour Backgrounds

The rock bee, Apis dorsata F. which by nature likes the open space in tall buildings and tall trees for nesting. This species is highly feroceous and attacks man at slightest disturbances (David and Kumarswamy, 1982, and Singh, 1962). The present survey work was taken up during 1991 and 1992 to know the preference of rock bees to construct the nest on different coloured backgrounds under natural conditions. The survey work was carried out in the around Dharwad including Hubli by selecting the tall and suitable buildings for observations which are of more or less same height. Totally, nine places were selected, out of which three were in U. A. S. Campus, three in Dharwad city and three in Hubli. These place were located quite away from each other ranging from 200 meters to 30 kilometers approximately.

The results indicated that the maximum number of rock bee colonies settled on ivory colour which recorded 217 colonies out of 343 colonies observed. This was followed by smoky (light grey) with 70 colonies, brick red with 31 colonies and light blue with 25 colonies (Table 1). Brick red colour recorded more colonies at Hubli as there was no other tall building for nesting. Except for this, only light shaded colours attracted maximum colonies for nesting which is more or less in agreement with the statement made by David and Kumarswamy (1982). Further no rock bee colony was observed setting on black and deep red coloured building. The results of

Table 1. Number of rock bee colonies found on different coloured backgrounds

Colour	Number of colonies		Per centage of colonies	
	1991	1992	1991	1992
lvory	217	241	63.26	61.33
Brick red	31	42	9.04	10.69
Light blue	25	19	7.29	4.83
Smoky	70	91	20.41	23.15
Black	- -			
Deep red				
Green			_	

the survey conducted during 1992 also followed the same trend with little change in the percentage of attraction. The observations have indicated that the rock bees prefer the light colours for their nesting than the deep colours.

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References

DAVID. B. V. AND KUMARSWAMY, T., 1982, Elements of Economic Entomology, Popular Book Depot, Madras, p. 536.

SINGH, S., 1962, Bee-keeping in India, ICAR, New Delhi, p. 214.

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Reaction of Cowpea Genotypes to the Damage of Pod Borer Complex

Cowpea suffers from the severe attack of a good many number of pod borers. The earlier workers screened the characters like infested pod touching any part of the plant (Singh and Taylor 1978), crop phenology (Jackai 1981), earlyness and uniform pod maturity (Ezueh and Taylor 1981), plant type, flower and pod colour, pod position and shape and days taken to pod maturity (Jayappa 1984). In the present investigation an attempt was made to evaluate the different genotypes for their reaction to cowpea pod borer complex.

Twenty three new genotypes with different morphological characters were

screened at MRS, U. A. S. Dharwad to know their reactions to the pod borer damage. Each genotypes was sown in a row of three meter length and replicated three times. The genotypes were sown in the second week of July 1987 following the recommended package of practices (Anonymous, 1986), except the plant protection measures. The pod borers recorded during the study were Maruca testulasis (Geyer) (Lepidoptera: Pyralidae), Cydia ptychora Meyrick (Lepidoptera: Tortricidae) and Lampides boeticus Linnaeus (Lepidoptera: Lycaenidae).

Five plants were selected at random from each treatment and percentage of pod