Table 1

| Species | Family | Days | Months | Times observed to feed on Orange | Pink |
|---|---|---|---|---|---|
| *Precis almana* | Nymphalidae | 16 | 4 (12) | 218 | 13 |
| *Danais chrysippus* | Danaidae | 16 | 3 (3) | 142 | 102 |
| *Papilio polytes* | Papilionidae | 4 | 2 (2) | 15 | 31 |
| *Papilio demoleus* | Papilionidae | 18 | 3 (3) | 42 | 98 |
| *Caloprilo agrantha* | Pieridae | 27 | 5 (12) | 40 | 803 |
| *Iduria multilas* | Hesperiidae | 12 | 3 (3) | 1 | 108 |

The numbers in the column 'Months' give the number of months during which that species was observed, and, in parenthesis, the total number of months which include the first and last observations of it.

must assume that these preferences are not learnt and temporary, like those previously reported for bees[2], but are characteristic of all, or most, individuals of a species.

The evidence that the butterflies are reacting visually to the colour of the flower, and not to some other stimuli correlated with it in these stocks, will be discussed elsewhere. But whatever the nature of these stimuli such instinctive preferences must very greatly favour homogamy. So if a new colour mutant is a recessive the insects' behaviour will maintain homozygosity once mutant phenotypes have segregated in the population: if a dominant, the insects will both produce homozygotes and maintain them in the population. The two colour forms will be more or less isolated sexually, and thus have the possibility to become further differentiated, for example, in odour, structure, and flowering time, to suit different pollinators. Therefore, the discovery of such capacities among insects re-opens the discussion as to whether sympatric speciation can be initiated by a single gene mutation[3].

More details will be published elsewhere, including observations on individuals of other species, and on imagines which have emerged in captivity.

K. R. Dronamraju

Indian Statistical Institute,
Calcutta, 35.
Jan. 1.

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Department of Biology,
Memorial University,
St. John's, Newfoundland.

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## Selective Visits of Butterflies to Flowers: a Possible Factor in Sympatric Speciation

Two varieties of *Lantana camara* L. are feral and common in the suburbs of Calcutta. In that called 'pink' the buds and old flowers are pink, whereas the young flowers are white; in 'orange' the buds and old flowers are orange and the young flowers yellow. I have previously reported[1] that these varieties are visited by different species of Papilionoidea. A small experimental garden containing three plants of each colour has been watched for 46·75 hr. extending over a period of 13 months. Visits of all butterfly species were recorded. Table 1 gives the most recent totals on the five most frequent visitors. The long duration of the periods over which the observations were made makes it certain that more than one individual of each species was observed, and this has been confirmed by marking individuals. As these cannot be presumed to have been exposed to exactly similar stimuli we