

not so easy to discover a dust-coloured insect as when it is isolated on the top of a dry twig, whence it lets itself drop upon the passer-by.

As to the effect of the *Argas* bite on the human species, the symptoms vary as well as the time of suction following the bite. The effect seems to depend chiefly on personal idiosyncrasy, which probably also accounts for the comparative immunities and receptivities reported in reference to the bite of *Acanthia (Cimex) lectularia*, *Reduvius*, and of the different *Tipulides* and *Culicides*. R. A. Plaskett has been bitten twice, and in each case it took about twenty-four hours before fever and swelling set in. The numbness of the bitten parts, which is so characteristic of the bite of *Arachnides*, *Myriopodes*, and of some Hymenopterous stings, was not noticed in a single instance. Now, these observations agree very well with the statements that are in our possession regarding the effects of the bites of other *Argas*, and at the same time they explain the discrepancies in the statements of the effects of the bite of the dreaded *Argas Persicus*, which seems to be as local as our California insect.

The fatal termination in cases where persons have been bitten by *Argas Persicus*, which are mentioned by old Herodotus, and by Pallas in modern times, may have their origin in malarious fevers, which are very common in that district of the Persian Province Ghilan, between the Caspian Sea and the Elbrus Mountains, where the *Argas* is found. The bite of the animal is probably only a coincidence, of course not favourable to the condition of a patient already weakened by malaria. Here in California we have had to face an analogous error with regard to the fatal effects of *Rhus diversiloba*. All the fatal cases were malaria patients, sick for a considerable time before they came in contact with the *Rhus*.

As to the effect of the bite of *Argas Persicus*, even if not fatal, the consequences in some instances must be serious enough to induce the inhabitants of Persian villages to change the location of their settlement, as is mentioned in Kotzebue's report of his travels through Ghilan. At the same time, this change of location as a remedy is another proof of the very local distribution of *Argas Persicus*, a peculiarity shared in common with *Argas Columbæ* of Europe and our own Santa Lucia species.

Our Santa Lucia species seems to be both diurnal and nocturnal. The *Argas Columbæ* of Europe is nocturnal, and in its habits bears a