"Nectar—a fluid always sapid, usually sweet, often odorous, which is elaborated in any part of a plant, remaining where formed or making its way to some other part; its *raison d'être* being the necessity for the removal of some useless or injurious substance, or as some provision to attract nectar-loving animals to the plant for some definite purpose." This is rather long for a definition, and it might be objected that it includes resinous exudations. After grouping the various positions of the nectaries under the general heads of floral or extra-floral, Mr. Trealease discusses specially those on the several divisions of these parts.

On the cotton plant the most copious source of nectar is the base of the bracts which surround the flower, and to it, are attracted many ants, wasps and bees, and during the night previous to the flowers unfolding, thousands of the moths whose larvae are most destructive to the flowers and fruit. "So it appears that the secretion of these glands first attracts the worst enemies of the plant, and then attracts their enemies, which afford it partial relief from the misfortune that it has brought on itself."

The whole essay will be found entertaining and instructive. Appended is a very valuable index to all books or articles treating of nectar and the fertilization of flowers in general.

§ 70. **Irritability in Robinia.**—The *Comptes rendus* of the French Academy (Tome XC. No. 21) contains a note by Mr. T. L. Phipson on the development of irritability in *Robinia Pseudacacia*, L. The author tried some experiments last year to ascertain whether he could produce in this tree phenomena of sensitiveness (or excitability, to use Dutrochet's term) like those observed in the sensitive plant. His first experiment was made at half-past five o'clock in the afternoon of Sept. 17th, while the sun was shining brightly. He found that on subjecting the terminal leaflet to 10 to 20 quite strong raps with his finger, the lateral leaflets soon began to approach each other, and that at the end of five minutes the whole leaf was in the same state of "sleep" as at midnight. The lateral leaflets closed up one after the other, beginning with the one nearest the terminal leaflet, just as they are observed to do in the sensitive plant. The author found that it afterwards required two or three hours strong sunshine to cause the leaflets to expand and resume their horizontal position. Subsequently, he tried the effect of strong heat on the terminal leaflet, and found that he could burn it to a crisp without affecting the lateral leaflets—a result directly opposite to that obtained in a like experiment with the sensitive plant. From this he concludes that the sap moves more slowly in the former than in the latter plant. From these experiments the author believes that he has obtained additional evidence in support of an opinion put forth by him in 1876, that: "The reason why the movements of the sensitive plant have been regarded as so marvellous is that, up to the present time, they have been looked at as something entirely exceptional, whereas they are only the highest degree of development of a phenomenon, the traces of which we can follow throughout the entire vegetable kingdom."