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HAWKmoth Pollination
In the Genus Oenothera1,2

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Pollination of Species in Other Subgenera of Oenothera

Species in several other subgenera were studied during the spring of 1959 and 1960. Each species was observed from one to several times, but if several observations were made, they were at different colonies, no one colony studied over a long period as with O. boonkeri. In this chapter the species involved will be taken up by subgenus and the observations summarized and compared (Fig. 1).

The Species and Colonies

Salpingia—Two species of this subgenus were studied, Oenothera greggii at two localities and Oenothera bartogwii at three. These colonies all grew along the road, on rolling mesquite desert at the lower elevations (Fig. 10) and on grassy plains at the higher elevations. The localities and dates were the following:

Oenothera bartogwii
(1) near Fort Davis, Jeff Davis County, Texas, at 5000 feet, on 9 May, 1959
(2) in Ector County, Texas, at 2800 feet, on 10 June, 1960
(3) south of Monahans, Ward County, Texas, at 2600 feet, on 12 May, 1959

Oenothera greggii
(1) west of the Chiricahua National Monument, Cochise County, Arizona, at 4000 feet, on 2 June, 1960
(2) east of Sanderson, Terrell County, Texas, at 2800 feet, on 24 May, 1959.

The plants of both species are low, shrubby perennials with few to many stems growing from a woody base (Fig. 10). The colonies studied contained from 25 to over 100 scattered plants, each bearing from 10 to 100 fresh flowers per night. The largest colony was the one near Monahans of which more than half is shown in Fig. 10. At most of the localities, colonies such as the ones studied were growing at intervals of several hundred yards to several miles along the road, so that each colony was usually part of a larger population.

The temperature during the observations was usually warm. The high wind which is so characteristic of western Texas was the most noticeable difference from the conditions prevailing at colonies of O. boonkeri. On two occasions, at Sanderson, Texas, and in Arizona, the sky was heavily overcast.

1Part of a doctoral dissertation prepared at the Rancho Santa Ana Botanic Garden and the Claremont Graduate School, Claremont, California.

2See Alice 1(3): 357-384, 1964 for the first section of this paper.

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