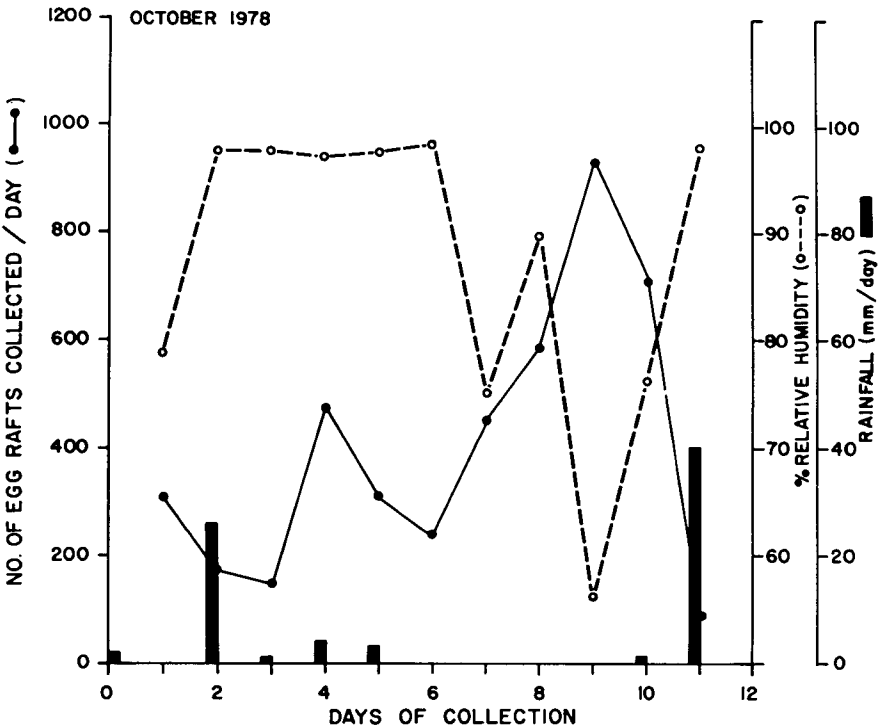

Figure 10. Oviposition pattern by *Culex nigripalpus* in the field in artificial oviposition sites.

period (Bidlingmayer 1971, 1974, Boike 1963, Dow & Gerrish 1970, Provost 1969, 1973). On the other hand, the rainfall may have diluted the infusion medium and thus reduced any odors emanating from the water. After a few days, fermentation of the infusion would have again produced an odor strong enough to stimulate gravid females to lay eggs. Observations in the field substantiate that more egg rafts are laid a day or two after a rainfall of 25 to 30 mm.

In the laboratory, F_1 (wild) *Cx. nigripalpus* females seldom became inseminated, and even though they blood-fed and developed mature eggs, they did not lay these eggs. Colonized females became inseminated, blood-fed, and developed eggs. However, only a small percentage oviposited immediately after the eggs were mature (Nayar & Pierce 1980). By 2 weeks, approximately 18% of the females had laid eggs and in the subsequent seven weeks, 40% of the females oviposited. During this nine-week period and after repeated blood meals, 66.7% of the females laid eggs but many never oviposited. Wild blood-fed females were collected in a chick-baited lard can trap and allowed to oviposit under laboratory conditions. After five days an average of 23% had oviposited, and during the following four days, a total of 50% of the females oviposited (Nayar & Pierce 1980). This indicates that under laboratory conditions, *Cx. nigripalpus* does not