eride reserves coincided with a 50% survival time. The 50% survival times varied from 58 to 78 hours for males and 62 to 82 hours for females. The maximum difference between 50% survival time and 0% survival was 8 to 10 hours only, indicating that adults rapidly die off once they start to die (Nayar & Pierce 1977).

In order to compare the size, reserves, and 50% survival times of laboratory reared mosquitoes with those in the field, pupae were collected from citrus grove swales near Vero Beach at 3-week intervals during 1975 to 1976. The emerging adults had an average dry body weight of 450 μg, of which 5% to 8% was lipid, and 5% to 6% was glycogen. Their mortality was recorded at 4 hour intervals, resulting in an average 50% survival time of 54.5 ±12.5 hours for males and 63.6 ±13.4 hours for females. However, pupae collected during February produced adults that survived almost twice as long, with a 50% survival time of 115 ±30 hours for males and 130 ±25 hours for females. An improvement in these results might occur if the natural foods are concentrated either through evaporation or enrichment of the breeding waters. But when larvae develop in food deficient waters, weaker adults are produced.

Focal Distribution

The adult *Cx. nigripalpus* emerges during the early part of night and immediately settles in the grass and shrubs that are marginal to the larval site. By daylight these adults move to areas of dense vegetation, such as oak or cypress hammocks with dense canopy. Provost (1969) observed that during the daytime *Cx. nigripalpus* rests in dense vegetation, close to the ground, or even within the leaf litter or ground detritus. The hotter and drier the day, the deeper the adults will penetrate such concealment, while on humid, overcast and cooler days, they are less compelled to hide themselves. The nighttime climate in Florida permits them to rest anywhere from the tree tops to the ground. *Cx. nigripalpus* is generally regarded as an outdoor species, but when populations are large, they occasionally enter houses (Carpenter & LaCasse 1955). These observations were experimentally confirmed recently when newly emerged ^{32}P-marked, unfed adults were released at Tiger Hammock (Nayar et al. 1980). In the area surrounding the release site (circle with 0.4 km radius), more resting adults, both marked and unmarked, were collected during the day from the young and mature oak hammocks than from the Brazilian pepper-shrubs and pine-palmettoes (Table 10). In the adjoining area (a circle with a radius of 0.4 to 1.2 km), the concentration of adults in the oak hammocks was even more pronounced. On the other hand, blood-seeking females were more evenly distributed throughout all vegetational areas, with the exception of open pastures (Table 10).

Seasonal Occurrence

The records of both New Jersey light traps and chick-baited cans, collected over a period of 11 years at the FMEL show that the breeding of *Cx. nigripalpus* is at its lowest level from January through March, followed by a slow population