

sperm transference is not connected with copulation. The time when it occurs is difficult to guess. According to PAJUNEN it could probably occur before arriving at the water area, probably soon after sexual maturity of the gonads has been reached.

Undisturbed copulation was observed to take 15—25 minutes. Separation occurs when the couple are resting on shore vegetation near the pool.

After copulation the female either oviposits at once or she leaves the pool in order to avoid attention from other males. In such a case she returns when males are less active and their density in the water area is lower. Oviposition in twilight was observed several times, especially in clouded weather.

If a female is going to oviposit immediately after copulation, she is protected by a male who flies above her in order to ward off other approaching males as well as individuals of *Libellula quadrimaculata*. If a female oviposits alone, without male protection, she seeks hidden places among or under thick shore vegetation where males do not follow her.

As can be seen from the above, the differences in behaviour between *L. pectoralis* and *L. dubia* and *L. rubicunda* (PAJUNEN 1962, 1963) are very small. From the point of view of behaviour the genus *Leucorrhinia*, as far as we know, seems to be very uniform.

#### References

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*Catephia alchymista* Schiff. in 1963 (Lep., Noct.). Hoewel ik de eikebomen op de bekende vindplaatsen te Linne en Echt (Sint Joost, Heingen, Pey en Slek) door omstandigheden niet geregeld kon controleren, heb ik de indruk, dat deze soort weer zeldzamer geworden is: in totaal hier slechts 10 exemplaren gezien in 1963.

In 1962 werden te Belfeld nog slechts enkele exemplaren gevonden, in 1963 werd hier niet één exemplaar meer waargenomen!

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*Selenia lunaria* Schiff. (Lep., Geometridae). In 1963 had ik een klein ei-kweekje van deze soort, afkomstig van een gevangen ♀. De rupsjes werden ingebonden op wilde roos en inlandse eik. Half juli werd de kweek binnenshuis voortgezet; er waren toen reeds poppen, maar ook nog vrij kleine rupsen. Doch uiteindelijk leverden alle rupsen (op één verdroogde pop na) tussen 31 juli en 11 september de vlinder.

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