

14. *Leucania albipuncta* F. Hardly outside its usual territory.
15. *Heliothis scutosa* Schiff. 1 ex.
16. *Heliothis peltigera* Schiff. Several exx.
17. *Laphygma exigua* Hb. 3 exx.
18. *Plusia gamma* L. As a rule moderate.
19. *Plusia confusa* Stephens. 2 exx.
20. *Nycterosea obstipata* F. 3 exx.

A very good year for migrants.

Amsterdam-Z., Oude IJselstraat 12III, Mei 1946.

Papilio machaon L. en Citrus (Lep.)

door

D. MAC GILLAVRY

Over de verschillende voedselplanten van *Papilio machaon* L. is voor 10 jaar in onze Nederlandsche litteratuur een en ander medegedeeld door W. M. Docters van Leeuwen en F. Derenne. Bij de bestudeering van het boek van F. S. Bodenheimer over de dieren van Palestina, reeds in 1935 verschenen, vond ik ook over deze kwestie een passus, die mij zeer belangrijk voorkomt en dien ik daarom woordelijk hier aanhaal. Deze passus staat in het hoofdstuk „Citrus pests”, p. 358 :

„The situation is different with *Papilio machaon* which in recent years seems to pass to Citrus trees in increasing numbers. Ruta and Umbelliferae were for a long time known to serve as foodplants for the butterfly, which is wide-spread in the Palaearctic region. From all tropical countries, however, the butterflies nearest related to *P. machaon* are known as Citrus pests. It is surprising that no attack on Citrus has yet been reported from other Mediterranean countries. Owing to the cultivation of Citrus trees these butterflies have regained an old potential host. In this case too, there can be no question of a new adaptation. In all other cases it applies to either a forced feeding or to occasional feeding at a certain stage. But none of these pests can develop entirely on Citrus. The rind gnawing ants for example, the Tenebrionidae which feed on leaves and buds, the pollen-eating Scarabaeid beetles and others belong to this category.”

Hier wil ik aan toevoegen, dat in ons land reeds voor bijna 70 jaar een rups van *P. machaon* door J. G. H. Rombouts op Citrus gevonden en daarop groot gebracht werd. In het Verslag van de 33e Zomervergadering der Ned. Ent. Ver. 1878 staat op p. XVIII :

„Eindelijk maakt de heer Rombouts nog melding van de rups van *Papilio Machaon* L., die hij op een oranjeboom vond en verscheidene dagen tot aan de verpopping met de bladeren van dien boom voederde.”

Deze opmerking kwam via D. ter Haar (1904) door Diakonoff's litteratuur-samenvatting in het artikel van Docters van Leeuwen terecht.

Nu ik Bodenheimer's werk vermeld, wil ik niet nalaten er op te wijzen, hoe in de afdeeling dierkunde van de Hebreeuwsche universiteit van Jerusalem bij voorkeur de levensgeschiedenissen van de ge-

wone diersoorten worden uitgewerkt. Van verscheidene insecten zijn daar de invloeden van de zoo varieerende Palestijnsche klimaten, van de dagelijksche temperatuurschommelingen, enz., al beter bekend dan van menig gewoon insect uit ons vaderland.

Gebruikte litteratuur:

1. Bodenheimer, F. S. — Animal life in Palestina — Jerusalem, 1935, (p. 358).
2. Dammèrman, K. W. — The agricultural Zoology of the Malay Archipelago. — Amsterdam, J. H. de Bussy, 1929 (p. 182).
3. Derenne, F. — Au sujet des plantes nourricières de *Papilio machaon* L. — Entom. Ber. no. 213, vol. IX, 1 Jan. 1937 (p. 295).
4. Diakonoff, A., Zie sub. 5.
5. Docters van Leeuwen, W. M. — A new food-plant of *Papilio machaon* L. (met litteratuuropgaven door Diakonoff, A.). — Entom. Ber. no. 211, vol. IX, 1 Sept. 1936 (p. 264—267; fig.).
6. Haar, D. ter — Onze Vlinders. — 1904.
7. Maxwell-Lefroy, H. & Howlett, F. M. — Indian insect life. — Thacker, Calcutta & Simla, 1909 (p. 422 sqq).
8. Rombouts, J. G. H. — (Rups van *Papilio Machaon* L. op' oranjeboom). — Versl. 33e Zomerverg. Ned. ent. Ver. 29 Juny 1878, Tijdschr. v. Entom. XXII, 1879 (p. XVIII).

Amerongen, Rusthuis Charlois, Sept. 1946.

A new Record of Age, reached by Ant-Soldiers

by

A. STÄRCKE.

From the 7 soldiers of *Camponotus piceus* Leach, mentioned already previously in this periodical, there are still five soldiers alive. As they were received from Hungary (J. P. Rössler) in March 1935, partly as imagines, they have now reached the age of at least 11 years, 2 months and some days, which is by far the highest age ever recorded for ant-soldiers or workers, free or in captivity.

During the winters of the first seven years, one part of the nest was heated, the dark chamber being placed on metallgauze above a radiator. During the later waryears, there was no heating available, and temperature at night was often below freezing point, but one half of the nest being wrapped in woollen cloth, the ants generally were not cooled below zero for a time longer than a few hours at max., which did no mortal harm to them. In the heated period, the other half of the nest was kept cool, so that the ants could choose their own preference-temperature (which they very seldom did). Thermotaxis proved weaker than nestodor.

Den Dolder, June 8, 1946.

P.S. The last two soldiers died between Aug. 31st and Sept. 18th, aged at least 11 years, 5 months and some days. They both were large soldier of the original crew.

In *Tabulae Biologicae Periodicae* VI (1936/37) 267 a record of a *Camponotus ligniperda* Latr. worker aged 13 years (*C. lign.* "♂ bis 13 Jahre") is found. This page is signed by Stitz, but I have not been able to detect the original paper and I suppose some error, the ♀ probably erroneously having been recorded as a ♂, or maybe a typographical error.

Den Dolder, Sept. 21, 1946.

Literature Cited.

Stärke, A., The oldest ant-workers on record. Ent. Ber. XI, no 254, 30.XII.1943, p. 137.