

---

## **On the Food Plant of the Large Southern White Butterfly, *Ganyra phaloe lamonti* (Kaye) (Pieridae)**

Kaye (1919) described *lamonti* as a subspecies of *Pieris phaloe* Godart from specimens captured by Sir Norman Lamont at Morne Diabale, 9.iv.1917. Barcant (1970) treats it as *Ascia buniae lamonti* and coined the common name "Large Southern White". Lamas (2004), in the recent checklist of Neotropical butterflies, places *phaloe* (with *buniae* as a synonym) in the genus *Ganyra* (previously treated as a subgenus of *Ascia*), and lists more than ten other subspecies from other parts of South America.

*Ganyra phaloe lamonti* appears to be a subspecies endemic to Trinidad. Barcant (1940) considers it to be

a forest species restricted to the South of Trinidad, particularly the south-western peninsula and south central Trinidad (e.g. Morne Diabale, Inniss Field, Quinam). More recent records also support this assessment.

Kaye (1921) includes the surprising statement "Larva on *bidens*" – surprising, because Pieridae are not recorded to feed as caterpillars on Asteraceae. Barcant (1970) does not include this information, perhaps because he considered it suspect. In view of our observations below, I believe that Kaye's food plant record is a transcription error for a reference to adults nectaring on *Bidens*.

On 17 May, 1999, Scott Alston-Smith and I observed a female *G. phaloe lamonti* at Inniss Field. The female was fluttering around a low growing plant in dappled sunlight within the light forest cover that prevails in that area. She showed typical ovipositing behaviour – alighting, taking off, fluttering, alighting again nearby, and appeared to oviposit once before flying away. On the leaves where we thought we had seen the female oviposit, we found two typical spindle-shaped pierid eggs. One, which we assume had just been laid, was yellow, but the other was orange and probably was some days older. The eggs were both laid in the middle of the leaf lamina on the upper surface of the leaf. We did not attempt to rear from these eggs. Closer examination showed that the plant was sprawling across the forest floor, and my herbarium specimen (No 259) was subsequently identified by Winston Johnson of the National Herbarium as *Steriphoma elliptica* Spreng. (Capparaceae).

Williams (1929) treated the Capparaceae (as Capparidaceae) in the Flora of Trinidad and Tobago: *Steriphoma elliptica* is a shrub or small tree, reported from Gasparee, Chacachacare, Phillipine, near San Fernando. More recent records from the 1980s are from Cedros, Quinam Rd., Southern Range, and San Fernando Hill (Y. Baksh-Comeau pers. comm. 2006). The correlation with the distribution of *G. phaloe lamonti* in southern Trinidad suggests that a restricted distribution for its main or only food plant is a major explanatory factor for the distribution of this butterfly in Trinidad.

Cock (1984) reported the food plant of the congeneric *G. josephina janeta* (Dixey) (as *Ascia menciae janeta*) to be *Capparis odoratissima* (Capparaceae). Other records for this species across its range include other *Capparis* spp., and *Forchhammeria* spp. (Capparaceae) (DeVries 1987; Smith *et al.* 1994; Janzen and Hallwachs 2006). *Ganyra howarthi* (Dixey) feeds on *Atamisquea* (Capparaceae) in the Sonoran desert of California (Bailowitz 1988). Thus, Capparaceae are the only food plants recorded for the three recognised species of the genus *Ganyra*.

Now that a food plant is known, it would be of interest to record the full life history of *G. phaloe lamonti*, for possible comparison with other subspecies.

## REFERENCES

- Bailowitz, R. A.** 1988. Systematics of *Ascia* (*Ganyra*) (Pieridae) populations in the Sonoran desert. *J. of Research on the Lepidoptera*, 6: 73-81.
- Barcant, M.** 1970. Butterflies of Trinidad and Tobago. London: Collins. 314 p.
- Cock, M. J. W.** 1984. Lepidoptera Notes I-VI. *Living World. J. of the Trinidad and Tobago Field Naturalists' Club*, 1983-1984: 35-37.
- DeVries, P. J.** 1987. The Butterflies of Costa Rica and their Natural History. Princeton, New Jersey: Princeton University Press. 327 p.
- Janzen, D. H. and Hallwachs, W.** 2006. Dynamic database for an inventory of the macrocaterpillar fauna, and its food plants and parasitoids, of Area de Conservacion Guanacaste (ACG), northwestern Costa Rica. <http://janzen.sas.upenn.edu:591/database.htm> <http://janzen.sas.upenn.edu:591/database.htm> (Last accessed 21.3.2006).
- Kaye, W. J.** 1919. New South American butterflies. *Ann. and Mag. of Natural History (Ninth Series)*, 3: 215-218.
- Kaye, W. J.** 1921. A Catalogue of the Trinidad Lepidoptera Rhopalocera (butterflies). *Memoirs of the Department of Agriculture, Trinidad and Tobago*, 2: 163 p.
- Lamas, G.** 2004. 97. Pieridae. Pp. 99-117. In **Lamas, G.** ed. Checklist: Part 4A Hesperioidea – Papilionoidea. Atlas of Neotropical Lepidoptera. Gainesville, Florida: Scientific Publishers. 439 p.
- Riley, N. D.** 1975. A Field Guide to the Butterflies of the West Indies. London: Collins. 224 p.
- Scott, J. A.** 1986. The Butterflies of North America. A Natural History and Field Guide. Stanford, California: Stanford University Press. 583 p.
- Smith, D. S., Miller, L. D. and Miller, J. Y.** 1994. The Butterflies of the West Indies and South Florida. Oxford: Oxford University Press. 264 p.
- Williams, R. O.** 1929. Cohort 2. Parietales. *Flora of Trinidad and Tobago*, 1(2): 23-41.

**Matthew J. W. Cock,**

CABI Bioscience Switzerland Centre,

Rue des Grillons 1,

CH-2800 Delémont, Switzerland

E-mail: [m.cock@cabi.org](mailto:m.cock@cabi.org)