

McDunnough) (Table 1). Catches of *H. americana* were not recorded. Most *A. falsarius* were in the trap baited with the R-(−)-enantiomer of BTDO, whereas nearly all *A. novaricus* were captured in the S-(+) baited trap.

This is the first documentation of attraction of *H. guatemalena*, *H. coracina*, and *A. novaricus* to BTDO and the first record of *A. novaricus* in the State of Florida (Kimball, C. P. 1965, Lepidoptera of Florida, Fla. Dept. Agric., Division of Plant Industry, Gainesville, Florida). Four male *H. americana* were caught in the R-(−)-BTDO trap in upper Key Largo (Table 1), which is a first record for this species in Munroe County, Florida (C. P. Kimball 1965, *op. cit.*).

Six species of Zygaenidae are now known to be attracted to 2-butyl(Z)-7-tetradecenoate, and all six appear to be fairly specific to either the R-(−) (*H. brillians*, *A. falsarius*) or S-(+) (*H. brillians*, *H. coracina*, *H. guatemalena*, *A. novaricus*) enantiomers. Although such specificity to optical isomers of a pheromone compound is known for other insects, it is uncommon (Silverstein, R. M. 1979, Chemical ecology: Odour communication in animals, pp. 133–146, Elsevier Press, Amsterdam).

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PETER J. LANDOLT AND ROBERT R. HEATH, *Insect Attractants, Behavior, and Basic Biology Research Laboratory, Agricultural Research Service, U.S. Department of Agriculture, Gainesville, Florida 32604*; GERHARD TARMANN, *Tiroler Landesmuseum Ferdinandeum, A6020 Innsbruck, Museumstrasse 15, Austria*.

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FIRST RECORD OF SATURNIA ALBOFASCIATA JOHNSON (SATURNIIDAE) FROM MEXICO

Additional key words: Baja California Norte, chaparral.

Saturnia albofasciata Johnson is widely distributed throughout much of California. It is recorded from Los Angeles, Riverside, San Diego, Ventura, and Kern counties in Southern California and from El Dorado, Lake, Mariposa, Tulare, Glenn, and Tehama counties in Northern California (Johnson, J. W. 1938, Bull. Brooklyn Entomol. Soc. 33: 128–130; Hogue, C. L. et al. 1965, J. Res. Lepid. 4:173–184; Ferguson, D. C. 1972, Bombycoidea (in part), Saturniidae, in Dominick, R. B. et al. (eds.), The moths of America north of Mexico, fasc. 20.2B:155–275, E. W. Classey, London; Lemaire, C. 1978, The Attacidae of America. Attacinae. Edition C. Lemaire, Neuilly-sur-Seine, France, 238 pp.; 1990 Field Seasonal Summary NEWS Lepid. Soc., 1991, No. 3, p. 18). Like many elements of the Californian fauna, *S. albofasciata* is suspected to occur in adjacent Baja California Norte; however, it previously was unreported from this or any other Mexican state.

On 28 October 1989, I caged four unmated, reared females of *S. albofasciata* at a site 11.5 km (7.1 mi) SW of Parque Nacional Constitucion de 1857 on the Laguna Hanson road in the Sierra de Juárez, Baja California Norte, Mexico (elev. ca. 1525 m). The site is 68 km south of the international border and 80 km south of the nearest known United States locality for *S. albofasciata* at Kitchen Creek, San Diego County, California. With sunny conditions between 1610 and 1700 h PST, 37 wild males were attracted to the virgin females, all of which were captured.

The Sierra de Juárez site is characterized by a mixed chaparral community, a habitat known to support *S. albofasciata* populations (Ferguson, *op. cit.*). Dominant plants include

Ceanothus greggii A. Gray (Rhamnaceae), *Adenostoma sparsifolium* Torr. (Rosaceae), *Arctostaphylos peninsularis* Wells (Ericaceae), *Artemisia tridentata* Nutt. (Asteraceae), *Quercus chrysolepis* Liebm. and *Q. dumosa* Nutt. (Fagaceae), and *Pinus jefferyi* Grev. & Balf. (Pinaceae).

On 27 and 29 October 1989 the unmated females were caged at a site in the vicinity of Mike's Sky Ranch in the Sierra San Pedro Mártir, approximately 170 km south of the international border. Despite sunny weather and at a similar elevation and floral community, no males were attracted.

Two males were deposited as voucher specimens in both of the following institutions: Universidad Autonoma de Baja California Norte, Ensenada, Mexico, and the Essig Museum of Entomology, University of California, Berkeley. Eleven specimens are in the private collection of John Noble, Anaheim Hills, California; the remaining 22 specimens are in the collection of the author.

RALPH E. WELLS, 303-B Hoffman Street, Jackson, California 95642.

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POSITIVE RELATION BETWEEN BODY SIZE AND ALTITUDE OF CAPTURE SITE IN TORTRICID MOTHS (TORTRICIDAE)

Additional key words: North America, biometrics, ecology.

Earlier I reported a positive correlation between forewing length and altitude of capture site in the Nearctic tortricid *Eucosma agricolana* (Walsingham) (Miller, W. E. 1974, Ann. Entomol. Soc. Amer. 67:601-604). The all-male sample was transcontinental, with site altitudes ranging from near sea level on east and west coasts to more than 2700 m in the Rocky Mountains. Altitudes of capture came from labels of some specimens, and from topographic maps for others. Forewing length increased 0.33 mm through each 500 m of site altitude. Forewing length is a reliable indicator of dry body weight, hence of body size (Miller, W. E. 1977, Ann. Entomol. Soc. Amer. 70:253-256).

More recently, I noticed at the American Museum of Natural History several series of other tortricid species with altitude labels. These numbered 34 or more specimens per sex or per species, and had been collected during the 1970's in New Mexico, Utah, Colorado, Wyoming, Idaho, Nevada, and Montana by the F. H. Rindge family. To extend the earlier work, I analyzed forewing length of these series with respect to altitude of capture site. Here forewing length is the maximum distance between wing base (excluding tegula) and tip (including fringe). The present study differs from the earlier one in three ways that are noteworthy: it involves three species, the data represent a smaller geographic area, and all altitudes are taken from labels.

I investigated each sex independently in *Choristoneura occidentalis* Freeman and *Pseudosciaphila duplex* (Walsingham), but combined the sexes in *Hystricophora asphodelana* (Kearfott), which does not exhibit marked sexual size dimorphism. In testing for correlation, I used Kendall's tau, a distribution-free, nonparametric rank-order statistic, as well as the more familiar Pearson product-moment correlation coefficient, r .

All five samples show evidence of positive correlation between forewing length and altitude of capture site (Table 1). Tau values for all five are positive, and three tau values are significantly ($P < 0.05$) greater than 0; r values for four samples are positive, and two r values are significantly ($P < 0.05$) greater than 0. I ruled out latitude as a hidden factor in the correlation because north and south partitions of the samples differed negligibly