

2-2008

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Repository Citation

Stireman, J. O. (2008). Tachinid Collecting in Southwest New Mexico and Arizona during the 2007 NADS Field Meeting. *The Tachinid Times* (21), 14-16.
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part of Florida's natural heritage, its native bromeliads. Once this goal has been achieved, a program for repopulating devastated areas with small plants grown from seed specifically collected from a number of hard-hit areas can begin.

Tachinid collecting in southwest New Mexico and Arizona during the 2007 NADS field meeting (by J.O. Stireman III)

Introduction

The 2007 field meeting of the North American Dipterists Society (NADS) was held August 13–16 in southwestern New Mexico, centered in Silver City (at Western New Mexico University), and the surrounding Gila National Forest. This was the first NADS meeting that I have been able to attend, and I think I can speak for all in saying it was enjoyable, productive, and interesting; an overall success. A more detailed account and evaluation of this meeting is available in the 2007 *Fly Times* article (O'Hara 2007).

Although the function of the NADS field meeting is partly to encourage interaction and scientific discussion and to serve as a forum for presentation of research and updates of dipterological activities, collecting remains an integral part of the meeting. The focus of my collecting was Tachinidae, the family on which I focused ecological and systematic studies while a graduate student in Arizona. This family appears to be particularly diverse in the southwestern region of North America, perhaps due to incursion of more tropical species and genera into this region and to the diversity of habitat types. Jim O'Hara, organizer of the NADS meeting and fellow tachinid admirer, has focused considerable attention on this region, making many trips over the years and describing many new taxa (e.g., O'Hara 1984, 1993, 2002). Here I provide an overview of the species that I collected during the NADS meeting in the area of southwestern New Mexico and southeastern Arizona.

Methods

All tachinids were hand collected with an insect net from foliage, rocks, or the air, except a few species that were collected in association with carrion baits that Terry Whitworth was kind enough to separate from his calliphorids and pass on to me (see Signal Peak collection and August 13, Cherry Creek collection in Table 1). Most collecting occurred between 9 am and 3 pm, however, the Molino basin collections were between 5 and 7 pm, and the Box Canyon specimens were collected at a UV light between 9 and 11 pm. I spent only one half day on the productive Gomez peak hilltop, and this occurred after Jim O'Hara and Monty Wood had each been there at least once in preceding days collecting large numbers of tachinids. It is possible that they may have depleted the numbers of

some of the rarer species on that particular hilltop.

Identifications were made with generic and species keys and descriptions from the literature (see O'Hara and Wood 2004) with particular reliance on Monty Wood's (1987) key to Nearctic genera. Specimens were also compared to previously identified material in my collection. These identifications should be considered preliminary as I have yet to verify most of them with reference to reliably identified specimens in a major collection. For many groups, I was unable to make a specific identification, or I felt uncertain about the identification made (these are indicated by question marks). Some specimens appeared to be quite similar to described taxa, but differed in one or more obvious characters. These may represent intra-specific variants (as I usually had limited specimens to examine), or distinct species. They are indicated by ("nr." species epithet).

Results and Discussion

In spite of the relatively limited collecting effort, a total of 139 individual tachinids were collected over a period of five days, representing an estimated 62 species (many of them unidentified morphospecies) (Table 1). I was only able to focus on collecting (i.e., spend at least 4 hours) on two of the five days, and these were spent at Gomez Peak (NM) and Cherry Creek (NM), (about 6 hours collecting each). Thus, these sites represented the bulk of the diversity and number of tachinids collected (44% and 28% of the total tachinids collected, respectively). Given the limited time I spent collecting and the limited number of sites I visited, along with my observations of tachinids collected by other dipterists at the meeting, this appears to be a small fraction of the local tachinid diversity in the region.

A few notable tachinid taxa included: *Euchaetogyne roederi* (Williston) (a large *Belvosia*-like dexiine tachinid that was common at the Cherry Creek site, but that I have seen nowhere else; Fig. 1), *Pararchytas apache* Woodley (described from the area by Norm Woodley, a NADS participant), the *Dolichocodia* specimen (bearing a remarkable resemblance to a calliphorid; I am uncertain whether the specimen belongs to this genus), and the attractive *Uramya* species (in which the males bear tail-like extensions of tergite 5).

Overall, there was a strong male bias in the collected specimens (72% male) as generally tends to be the case with hand collecting. As one might expect, this male bias was particularly strong for the hilltop site (Gomez Peak; 95% male), but it was also present at the creek-side site (Cherry Creek; 61% male). Interestingly, some small collections that were made in the afternoon (Molino Basin) and at a UV light (Box Canyon) were dominated by females (33% and 25% male, respectively), though the sample sizes were quite small.

The Tachinid Times

Table 1. Species of Tachinidae collected during August 12–17, 2007 in southern New Mexico and Arizona. Collections are broken down by site and sex (male or female).

Species	m	f	tot	Species	m	f	tot
Signal Peak 13-viii-2007 (carrion) NM				Cherry Creek Campground 14-viii-07 NM			
<i>Pararchytas apache</i> Woodley	1	-	1	<i>Admontia</i> sp. ?	1	-	1
<i>Protodejeania willistoni</i> Curran	-	2	2	<i>Aplomya theclarum</i> (Scudder)	1	-	1
Gomez Peak 15-viii-2007 NM				<i>Archytas</i> nr. <i>aterrimus/lateralis</i>	-	1	1
<i>Blondelia</i> sp. 3	1	2	3	<i>Blondelia</i> sp. 1	6	5	11
<i>Chetogena parvipalpis</i> ? (Wulp)	1	-	1	<i>Blondelia</i> sp. 2 (?)	1	-	1
<i>Chrysoexorista lineatea</i> (Wulp)	1	-	1	<i>Carcelia lagoae</i> (Tnsd.)	1	-	1
<i>Deopalpus torosus</i> (Rnh.)	2	1	3	<i>Chetogena tachinomoides</i> (Tnsd.)	2	-	2
<i>Dolichocodia bivittata</i> ? (Coquillett)	1	-	1	<i>Eribella polita</i> (Coquillett)	-	1	1
<i>Drino</i> sp. 1	1	-	1	<i>Euchaetogyne roederi</i> (Williston)	3	-	3
<i>Frontiniella festinans</i> ? (A. & W.)	1	-	1	<i>Frontiniella parancilla</i> (Tnsd.)	-	1	1
<i>Gaediopsis setosa</i> ? Coquillett	3	-	3	<i>Gnadochaeta</i> nr. <i>nigrifrons</i> (Tnsd.)	-	1	1
<i>Hyphantrophaga collina</i> (Rnh.)	-	1	1	<i>Leschenaultia halisidotae</i> Brooks	1	-	1
<i>Leschenaultia adusta</i> (Loew)	4	-	4	<i>Pararchytas apache</i> Woodley	-	2	2
<i>Leschenaultia grossa</i> Brooks	1	-	1	<i>Peleteria malleola</i> (Bigot)	1	-	1
<i>Lespesia</i> nr. <i>halisidotae</i> (A. & W.)	1	-	1	<i>Peleteria malleola</i> grp. (Bigot)	1	-	1
<i>Macromyza crocata</i> Rnh.	3	-	3	<i>Protodejeania willistoni</i> Curran	-	1	1
<i>Microphthalma disjuncta</i> (Wiedemann)	1	-	1	<i>Vibrissina mexicana</i> (Aldrich)	1	-	1
<i>Paradejeania rutiloides</i> (Jaenicke)	1	-	1	<i>Vibrissina obscura</i> ? (Aldrich)	4	1	5
<i>Patelloa specularis</i> (A. & W.)	5	-	5	<i>Voria ruralis</i> (Fallén)	-	2	2
<i>Patelloa</i> nr. <i>specularis</i> (A. & W.)	2	-	2	Molino basin, Santa Catalina Mts. 17-viii-07 AZ			
<i>Peleteria bryanti</i> Curran	2	-	2	<i>Drino</i> sp. 2	1	-	1
<i>Peleteria malleola</i> (Bigot)	4	-	4	<i>Eucelatoria armigera</i> gp. (Coquillett)	-	1	1
<i>Peleteria setosa</i> Curran	1	-	1	<i>Euexorista</i> nr. <i>rebaptizata</i> Gosseries	-	1	1
<i>Ptilodexia</i> nr. <i>californica</i> Wilder	1	-	1	<i>Leskia occidentalis</i> ? (Coquillett)	1	-	1
<i>Ptilodexia californica/obscura</i>	2	-	2	<i>Lespesia cuculliae</i> (Webber)	-	1	1
<i>Ptilodexia conjuncta</i> (Wulp)	7	-	7	<i>Lespesia</i> nr. <i>westonia</i> ? (Webber)	-	1	1
<i>Ptilodexia</i> nr. <i>conjuncta</i> (Wulp)	4	-	4	Box Canyon, Santa Rita Mts. 12-viii-07 AZ (UV-light)			
<i>Spallanzania</i> sp.	5	-	5	<i>Austrophorocera</i> nr. <i>einariis</i> (Smith)	1	-	1
<i>Uramya aldrichi/halisidotae</i> ?	3	-	3	<i>Chaetoglossa picticornis</i> ? Tnsd.	-	1	1
				<i>Eucelatoria (eucelatoriopsis</i> grp.)	1	-	1
Cherry Creek Cmpgd. 13-viii-07 NM (carrion)				<i>Ormia</i> undescribed sp.	-	1	1
<i>Hystricia</i> nr. <i>abrupta</i> (Wiedemann)	1	-	1	<i>Zaira</i> sp.	-	3	3
<i>Pararchytas apache</i> Woodley	-	2	2	<i>Zizyphomyia crescentis</i> ? (Rnh.)	-	1	1
<i>Peleteria malleola</i> (Bigot)	2	-	2	2 mi south of Cherry Creek Cmpgd 14-viii-07 NM			
<i>Protodejeania willistoni</i> Curran	-	3	3	<i>Deopalpus torosus</i> (Rnh.)	1	-	1
				<i>Peleteria malleola</i> (Bigot)	1	-	1
Burro Mts. Powerline Cyn. 16-viii-07 NM				Hwy 80 Hills N of Portal 13-viii-07 AZ			
<i>Drino</i> sp. 2	1	-	1	<i>Chetogena tachinomoides</i> (Tnsd.)	1	-	1
<i>Gaediopsis</i> sp. ?	1	-	1	<i>Eucelatoria armigera</i> gp. (Coquillett)	-	1	1
<i>Leschenaultia grossa</i> Brooks	-	1	1	<i>Eucelatoria</i> sp. 1?	1	-	1
<i>Ptilodexia conjuncta</i> (Wulp)	1		1	<i>Lespesia stonei</i> Sabrosky	1	-	1
<i>Ptilodexia</i> nr. <i>conjuncta</i> (Wulp)	1		1	<i>Orasturmia vallicola</i> Rnh.	-	1	1
				<i>Uramya indita</i> (Walker)	2	-	2

Interestingly, there was relatively low overlap between the taxa collected hilltopping on Gomez Peak and those collected by sugaring and hand collecting at Cherry Creek, despite the relatively close proximity of these sites (ca. 10 km apart). In fact, only a single species was shared between the two sites (*Peleteria malleola*), resulting in a Jaccard similarity index of 2.3%. The Gomez peak site was overrepresented by hilltopping Dexiini (e.g., *Ptilodexia*), Tachinini (e.g., *Peleteria*) and Goniini (e.g., *Patelloa*, *Gaediopsis*), whereas at the creek side site Blondeliini

were more abundant. It is unclear whether the large Tachininae found at carrion baits indicate a special attraction of those taxa to carrion, as it may be that smaller tachinids were relatively ignored by the collector who was focusing on Calliphoridae. More comprehensive sampling of these habitats would almost certainly increase this overlap, but it is likely that additional habitats not sampled would also have distinct communities with relatively little overlap. These results also reaffirm the importance of using multiple collecting strategies when seeking to maxi-

mize species diversity. It would be interesting to examine species overlap between these collections I made and those of other collectors who attended the NADS field meeting, given that we collected at many of the same sites. I suspect that there would be considerable variation in the taxa collected, attesting to the rich and varied tachinid fauna of the region.



Figure 1. *Euchaetogyne roederi* (Williston) from Cherry Creek, Gila National Forest, NM. (Photo by Steve Marshall.)

Acknowledgements

I would like to thank Jim O'Hara for doing a great job organizing the NADS field meeting in New Mexico and my lab technician Hilary Devlin for helping to compile the species lists.

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Some interesting Tachinidae from Israel (by C. Bystrowski and T. Zeegers)

The tachinid fauna of Israel is relatively well known due to the many contributions by J. Kugler. However, during the last twenty years little attention has been paid to the Israelian tachinid fauna.

In 2006, the first author together with Krzysztof Szpila from Nicolaus Copernicus University in Toruń (Poland) (Fig. 1) collected flies during a 20-day expedition to Israel (8–28 May 2006).

The Golan Heights region, numerous localities in the Negev Desert and some places near Eliat were visited. The most interesting place in Negev Desert seems to be En Avedat National Park (Fig. 2) near Sede Boqer, where we spent more than two weeks.

In addition to our collecting, the first author studied the Tachinidae collection in the National Collection of Insects at Tel Aviv University (TAU). During the two days of investigation two new species for the fauna of Israel were found: *Graphogaster buccata* and *Zeuxia tricolor* (see below).

In this contribution, we mention some of the more interesting species found or recorded as new for the fauna of Israel.



Figure 1. Cezary Bystrowski (left) and Krzysztof Szpila, southern Dead Sea area (16.v.2006). (Photo by K. Szpila.)

Metacemyia aartseni Zeegers, 2007

2♀♀: Israel, En Avedat, near Sede Boqer, Negev, st. 1, 24.v.2006, leg C. Bystrowski.

Only very recently described by Zeegers (2007) from Yemen. First record for Israel. It now seems that *M.*