"Hi, can anyone ID my new T?" [T_noob]

"Looks just like my stripeknee" [Spiderman1993]

"Does it have tan spinnerets?" [Arachnodude]

"Yes, spinnerets are tan color, just like the belly of the T." [T_noob]

"Tan spinnerets are a tell-tale sign of a stripeknee: Aphonopelma seemanni" [Arachnodude]

We have all seen threads like posted above. And I must admit it is starting to give me a headache. At some point in the discussion, a wise-guy throws in his "expert" vision: "I think this species could be Acanthoscurria borealis". The spider in the picture referenced by [T_noob] shows a blue-gray spider with a faint stripe pattern on the legs. The spinnerets are tan as well as the underside of the spider (the ventral side). According to the new version of Schultz and Schultz, these characters are a reliable clue to the tarantula’s identity. For me, this spider cannot be A. seemanni (F. O. P.-Cambridge). Why? Simple. Colors may vary from location as well as time in the molt cycle. For example, see specimens of Pterinochilus murinus Pocock. What, however, is stable within many tarantula species is pattern. A. seemanni has a straight line from the base of the metatarsus to about halfway down the metatarsus.

The faintly striped spider, however, has a diagonal stripe on the metatarsus.

It really puzzles me why we in the tarantula hobby are happy to accept that Poecilotheria hanumavilosumica Smith, 2004 is a valid species yet the difference between it and Poecilotheria fasciata (Latreille, 1804) is down to a single line on the leg. Yet, spiders often sold as A. seemanni look nothing like "the real deal" A. seemanni. Funny enough, the original description of the type specimen says nothing about tan spinnerets.
In 2008, I was lucky enough to go on a tarantula hunting trip to Central America. The countries visited included: Mexico (Yucatan), Belize, Guatemala, and Honduras. During this trip we found both the real A. seemanni and the Aphonopelma sp. that is often sold as A. seemanni. Let's look at these 2 species a bit more closely.

Santa Barbara, Honduras, is 660 ft above sea level. (Number 11 in the trip map.) In the banks along the road, we found large burrows that went straight in the bank and measured about 30". Upon shining a flashlight into the burrow we saw strong front legs with clear sharp lines, indicating Aphonopelma seemanni.

The first specimen we excavated was a female, close to a molt. We found these spiders on May 30, the beginning of the wet season. While some spiders have already molted, others still have the old skin.

Within 3 ft of the first burrow we find the second. We also dug this spider out. The second female is freshly molted and the colors are striking.

For the second species, we traveled to the semi-arid region of Guatemala. The Motagua valley and the surrounding semi-arid region have the lowest annual precipitation recorded for any part of Central America. Annual rainfall is as low as 500 mm, all of which falls in a short wet season (May–June). The rest of the year the surrounding mountains block the clouds. Again, in the banks along the road we find the burrows (Number 14 in the trip map) packed close to each other and in all sizes.
Travel route for the entire spider hunting trip: 1. Santa Barbara (Honduras); 2. Maya ruins at Copan (Honduras); 3. Motagua valley (Guatemala)

**Climate Info on Santa Barbara, Honduras:**

<table>
<thead>
<tr>
<th>Month</th>
<th>High Temperature (°F / °C)</th>
<th>Low Temperature (°F / °C)</th>
<th>Precipitation (in / mm)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Jan.</td>
<td>70 / 21</td>
<td>56 / 13</td>
<td>1.57 / 39.9</td>
</tr>
<tr>
<td>Feb.</td>
<td>74 / 23</td>
<td>56 / 13</td>
<td>1.15 / 29.2</td>
</tr>
<tr>
<td>Mar.</td>
<td>78 / 26</td>
<td>56 / 13</td>
<td>0.95 / 24.1</td>
</tr>
<tr>
<td>Apr.</td>
<td>81 / 27</td>
<td>60 / 16</td>
<td>1.72 / 43.6</td>
</tr>
<tr>
<td>May</td>
<td>80 / 27</td>
<td>62 / 17</td>
<td>6.04 / 153.5</td>
</tr>
<tr>
<td>Jun.</td>
<td>78 / 26</td>
<td>64 / 18</td>
<td>11.35 / 288.4</td>
</tr>
<tr>
<td>Jul.</td>
<td>77 / 25</td>
<td>63 / 17</td>
<td>8.30 / 210.7</td>
</tr>
<tr>
<td>Aug.</td>
<td>78 / 26</td>
<td>63 / 17</td>
<td>8.50 / 215.8</td>
</tr>
<tr>
<td>Sep.</td>
<td>78 / 26</td>
<td>63 / 17</td>
<td>11.64 / 295.6</td>
</tr>
<tr>
<td>Oct.</td>
<td>75 / 24</td>
<td>62 / 17</td>
<td>5.71 / 145.1</td>
</tr>
<tr>
<td>Nov.</td>
<td>71 / 22</td>
<td>59 / 15</td>
<td>3.00 / 76.3</td>
</tr>
<tr>
<td>Dec.</td>
<td>69 / 21</td>
<td>57 / 14</td>
<td>2.30 / 58.4</td>
</tr>
</tbody>
</table>

Data from: [www.wunderground.com](http://www.wunderground.com)
None of the specimens we found in Zacapa, Guatemala had molted yet. They were all a drab brown color, making the stripes even more faint. The only freshly molted specimen we found was on the eastern edge of the valley, at the Maya ruins at Copan, Honduras (Number 12 in the trip map). The burrow of this species looked like that of A. seemanni, straight into the bank. There was no need to dig out this species. Even in the daytime, they respond to the tickle method of luring a spider out of the burrow. Sub-adult males are a lot more defensive than the females and will readily show a threat display.

The main cause of species misidentification lies in the exporter’s hands. He lists this species as Aphonopelma seemanni. The importer just sells this spider under the same name it was received. And then, there is the hobbyist who insists, “I got this species from a reputed dealer so it is this species...”, never questioning the name the dealer writes on the box. In this case, the difference is so big that you don’t have to be a biologist to tell them apart. I’m sure the 2 species are close relatives. But not the same species.

When you want to breed your spider it is even more important to know what you have. We all know the possibility of hybrids and the problems they may cause (see the Brachypelma spp. mess we’ve experienced in the hobby. Can anyone say for sure they have a Brachypelma vagans of pure blood?)
Guatemala. This, however, tells nothing about where the spider was collected. The description given by Lago Izabal as a presumed location.

The spermathecae of *Achromatopus* is or a typical *Achromatopus*, and it was described from Hobby material. This is nothing like the spermathecae from *Aphonopelma*.

In the same area where we found the *Aphonopelma* sp. and other tripod spiders, *Chelifer*, we found an *Aphonopelma* sp. Again, nothing in the spermathecae. I'm sure you know the Costa Rican electrically charged species, *Acrochirus* sp. tula. What you've never heard of this tranquil species is that it was described from Hobby material. This spider allegedly came with a shipment from Holland, and perhaps many of you have heard this.

Hey, what about that *Achromatopus* borealis Schmutz & Peters 2005? You were taking about the problem with this species is that it was described from Hobby material. This species is nothing like the spermathecae from *Aphonopelma*.
species. Chance may have it that you do not have C. fasciatum, but rather C. pentalore. The same exporter that ships the Aphonopelma sp. “Guatemala” as A. seemanni, sells Cyclosternum pentalore as C. fasciatum. C. fasciatum comes from Costa Rica. The spermathecae of C. fasciatum are shaped like a triangle. Our look-alike has spermathecae that look like a triangle, but with a little structure on the tips. The type location for Cyclosternum pentalore is the Motagua Valley, which is exactly where we found them. If it was so easy to export Cyclosternum fasciatum, then why is it so hard to export all the other Costa Rican tarantulas? This mix-up brings our attention to yet another problem as seen on the tarantula forums. Question: “Hi, I’m looking for a care sheet for my C. fasciatum.” Answer: “They come from Costa Rica, and they like it warm and moist.” Nice try, but your C. pentalore comes from Guatemala and likes it warm and dry. C. pentalore is a beautiful opportunistic tarantula that doesn’t dig a burrow but hides under wood and rocks.

I hope this article will help the hobby understand the differences in the species and let everyone keep an open mind when dealers label their spiders.

For this article I used following publications as reference:


Vogelspinnen. L-J Nederlof, G. Kortekaas

Die Vogelspinnen. G. Schmidt

Tarantula Spiders. Tarantulas of the USA and Mexico. Andrew Smith

Wet Season Rainfall Accumulation for Central America – 2007 Map Production. UNOSAT (24 Oct. 2007)


Additional photos for this article are located in color section and front cover.