AMENDMENTS TO APPENDICES I AND II OF THE CONVENTION

Other Proposals

A. PROPOSAL

To include all species (and subspecies) of the genus *Brachypelma* (also known as *Euathlus*) in Appendix II.

B. PROPONENT

The United States of America.

C. SUPPORTING STATEMENT

1. Taxonomy

11. Class: Arachnida

12. Order: Araneae

13. Family: Theraphosidae (tarantulas)

14. Genus: *Brachypelma* (also known as *Euathlus*)

Species: *B. albopilosum, B. angustum, B. auratum, B. boehmei, B. emilia, B. fossorium, B. pallidum, B. sabulosum, B. smithi, B. vagans.*

15. Common Names:

English: Red leg tarantula
Red knee tarantula
Red rump tarantula
Flame knee tarantula
Orange knee tarantula
Rusty knee tarantula
Curly hair tarantula

French: Tarentules

Spanish: Patas rojas

16. Code Numbers:

2. Biological Data

21. Distribution: Most species of this genus have very limited distribution within the general area of Central America from central Mexico south into Costa Rica. Most of the species are known only from a very limited geographic region within one country. *B. vagans* has the largest distribution from Southern Mexico into Belize and Guatemala, old records from Costa Rica and Columbia may be of similar looking species. *B. emilia* has been reported from the Mexican State of Durango and from Panama, the latter may also represent a different, but similar looking species (undescribed). With the possible exception of *B. vagans*, the very limited distribution of the other species put each in potential danger of possible extinction. Both natural events such as drought and man-made destruction may easily cause the complete extinction of local populations. Individual populations are normally very restricted within small areas of their total range.

22. Population: No population study has been conducted on any of the species in this genus, with the exception of a limited study on *B. smithi* (currently in Appendix II) (Smith *et al.* 1988). In over two months of field study and over 2,000 miles of travel researchers found only one site in Michoacan (2 individuals, which disappeared while they were there) and three sites in Guerrero that were close together and with low numbers of tarantulas. *Brachypelma* species are difficult to study because they are primarily fossorial or burrowers.

23. Life history: Some *Brachypelma* species are long lived spiders, the females frequently living to 20 years with as many as 12 possible years for breeding. The males are mature for only one breeding season and are heavily preyed upon during their wanderings. While up to 1000 eggs may be produced in each egg sac, the number hatching can be much smaller and the losses in dispersal and early development may exceed 99%. The loss of any mature individuals is therefore a major threat to the species (R. West, pers. obs.).

24. Habitat: All members of the genus Brachypelma are ground dwelling, burrowing spiders. Species occur from semi-desert regions, through tropical dry deciduous forests, to tropical moist forests. The burrows are in sandy to clay soils , and in areas of greater moisture, often in higher sloped ground, where the entrance is protected from flooding rains. Because the majority of the species appear to inhabit tropical dry deciduous forests and these are the same habitats preferred by humans, the species have been greatly impacted by human agriculture and development. Biological data on Brachypelma species is extremely scarce. *B. smithi* is discussed in Well, *et al.* (1983).

    Several of the recently discovered species of *Brachypelma* are undescribed or virtually unknown scientifically and come from extremely limited geographic ranges. These are at a higher risk of becoming endangered.

3. Trade Data

Brachypelma tarantulas are both attractive and relatively docile. They therefore make very popular pets. While very little is known about the trade in *Brachypelma* tarantulas, it appears to be fairly substantial. Because of the time and expense necessary to rear hatchlings to maturity it is believe that most adult tarantulas in trade are wild-caught. In the proposal to list *B. smithi* on CITES Appendix II (U.S.A., 1985) it was indicated that over 16,000 tarantulas (all species) were imported into the United States in 1982. Members of the genus *Aphonopelma* could be confused with other theraphosids, including *B. smithi*. While the listing has slowed trade in *B. smithi*, it is still easy to obtain live specimens, with about one out of ten pet stores having individuals (R. West, R. Wolff, pers. obs). In 1993 trade in declared tarantulas (the percentage of them being *Brachypelma* is uncertain) was about 16,000 per year (USFWS data base).

Wild-caught tarantulas can often be distinguished from captive-hatched individuals on the basis of such physical characteristics as bare spots on the abdomen resulting from the "flicking" of hairs as a self defense mechanism, rub marks on the legs and cephalothorax occurring during transport, a shriveled abdomen caused by dehydration and lack of food during transport, loss of appendages, the presence of ectoparasite larvae, and often a disproportion of males to females in a shipment. Captive-hatched tarantulas are usually transported as spiderlings (Kirkby, 1994). Although captive-breeding of *Brachypelma* species does occur, it has been limited, largely to *B. smithi* (Kirkby, 1994) and it does not at present appear to be economically feasible.

31. National Utilization: No specific information is available of the use of *Brachypelma* species within range countries, although, since specimens are being exported from some of these countries, maybe some internal pet trade. Mature, live specimens are apparently harvested and sold to commercial dealers.

32. Legal International Trade: Mexico has allowed the export of some specimens of *B. smithi* over the years. We are not aware of any export restrictions for tarantulas by other range countries. TRAFFIC USA (Hemley, 1994) reports that "there is increasing evidence to suggest widespread trade in other *Brachypelma* species. TRAFFIC France has reported increased trade in tarantulas throughout Western Europe. *B. smithi* remains popular among collectors and sells for about US $200 in France. The orange-knee tarantula (*B. emilia*) is also widely traded while other species in commerce include *B. sabulosum*, curly hair tarantula (*B. albopilosum*), and red rump tarantula (*B. vagans*)." The number of suitable specimens of "prized" species is low, partly due to their very restricted populations.

33. Illegal Trade: Most of the *Brachypelma smithi* specimens are probably coming from Mexico without export permits, and therefore their trade is illegal. Some are shipped to Europe first, with shipment into the United States occurring at a later time. Advertisements of various U.S. animal dealers from 1992 and 1993 include redleg tarantulas, Mexican redleg tarantulas, etc., some identified as *Brachypelma* (or *Euathlus*) *smithi*, for sale. In 1988 over 2,000 live tarantulas, declared to be *B. smithi*, were seized entering the United States illegally from Mexico.

34. Potential Trade Threats: The continuing and possibly increasing popularity of tarantulas as pets, especially the red haired *Brachypelma* species, is a threat to the remaining populations of *Brachypelma*. The removal of easily captured males may prevent reproduction in small populations for that year. The removal of adult females, discarded eggsacs, or undesirable immature specimens has long term consequences for reducing the reproductive potential of a population. Until population sizes are known and sustainable harvest projections are determined, the trade in any of the *Brachypelma* species should be of concern.

4. Protection Status

Mexico prohibits the hunting and export of tarantulas without a permit and *B. smithi* is protected under Appendix II of the CITES agreement. As of May 18, 1994, *B. smithi, B. emilia* and *B. pallidum* have been listed as threatened species under Mexican law, and therefore commercialization of specimens of these species from the wild is illegal (Kirkby, D., 1994a). Specimens of *B. smithi* are often listed under other names to circumvent trade restrictions. Confusion over the identification and taxonomic names of all the species leads to a variety of problems in trading. The listing of all species in the genus *Brachypelma*, including any new species discovered in the future, would simplify and better protect all of these taxa.

5. Information on Similar Species

The taxonomy of the genus *Brachypelma* (=*Euathlus*) is unclear. The listing of all *Brachypelma* species would eliminate much of the confusion over identification. Most of the species are easily recognized by red or reddish hairs on the legs and/or abdomen. A few poorly known species might cause confusion during identification for trade purposes.

6. Comments from Countries of Origin

Mexico has stated their support for the proposal. Information and comments from the other range states are being sought and will be considered prior to the meeting of the Conference of the Parties.

7. Additional Remarks

8. References

Hemley, Ginette, Director, TRAFFIC USA, 1994. Letter to Dr. Charles W. Dane, Chief Office of Scientific Authority, March 14, 1994.

Kirkby, D., 1994. Biology and trade of Mexican *Brachypelma* species. Unpublished report.

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Smith, R., J. Sleeman, J. Batchelor and R. Haworth, 1988. Report of the Cambridge tarantula project 1988. Privately Published, 12 pp.

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