

**AMHYADESIA CALIFORNICA G.N., SP.N. (ACARI, ASTIGMATA, HYADESIDAE)
FROM THE SOUTHERN CALIFORNIAN COAST**

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-----ABSTRACT—*Amhyadesia californica* g. n. , sp. n. (Astigmata, Hyadesidae) is described from the intertidal zone in Southern California, U. S. A. -----

Hyadesia glynni Manson (1963) was the only species of the genus known from the Western Coast of America. The junior author found on the rocks of the Southern Californian Coast a small series of mite that differs from all the known species in the genus and is described here as new.

Up to now 15 species have been described in the genus *Hyadesia*. Many of these species have been inadequately described and it is impossible to recognize them from the original description or figures.

Our species possess a large punctate and pitted shield on the hysteronotum³ which extends to the opisthogaster in both sexes. In all other species in the genus a shield is absent on the hysteronotum. We think, therefore, necessary to separate these two species into a new genus.

Through the courtesy of Dr. R. Smiley we were able to examine paratypes (a male and two females) of *H. glynni* Manson deposited in the U. S. National Museum, Washington, D. C. . However, we could not examine the holotype of this species because it was not deposited in the USNM collection (R. Smiley, in litt.).

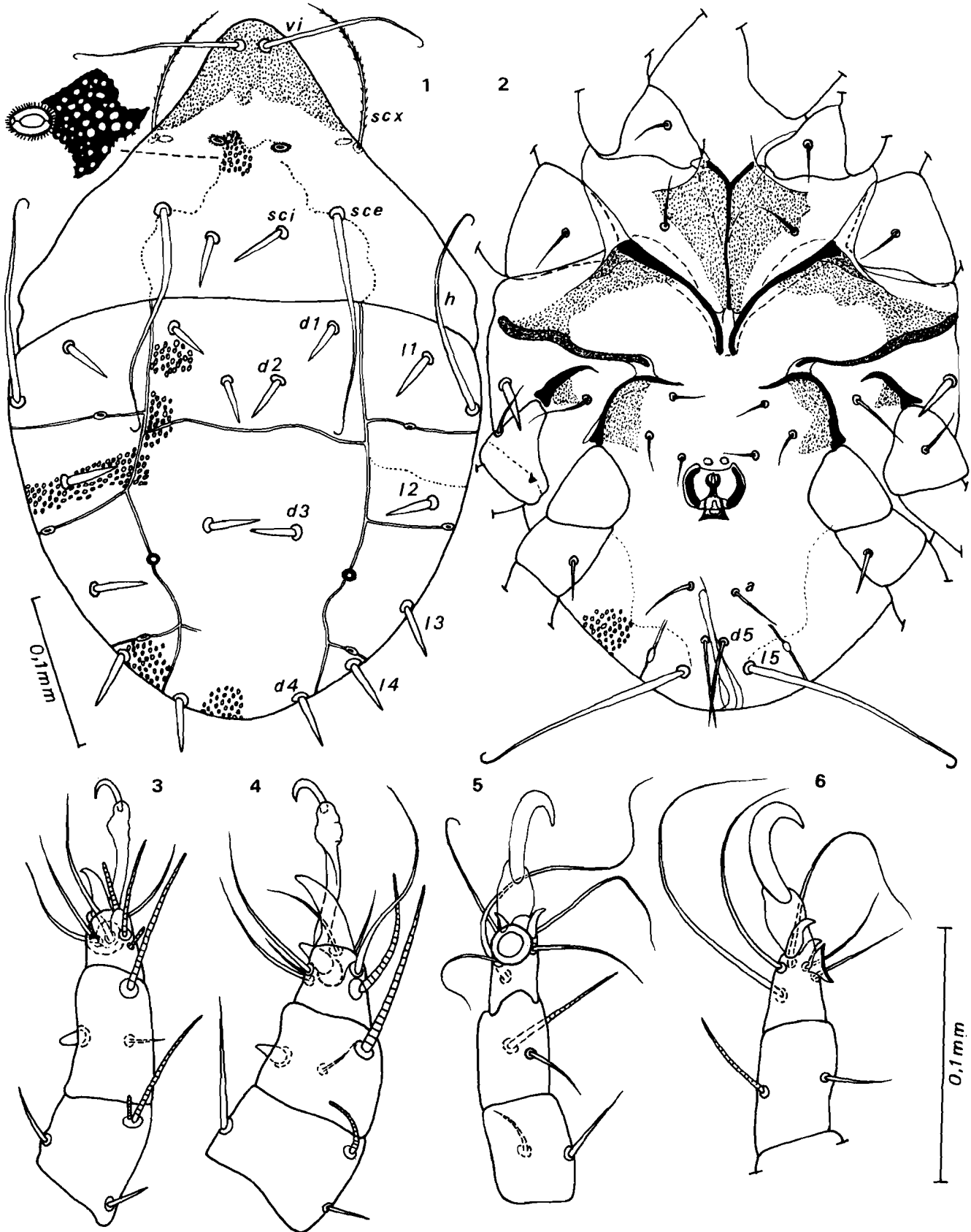
From the excellent description of *H. glynni* by Manson and the examination of paratypes we note the following differences between the two species: In the female of our species the punctate pitted area is much larger and covers nearly completely the hysteronotum and a large part of the median area of propodonotum, the pits on this shield are rather large; setae *d*1 to *d*4 are thick and short (20 to 32 μ long). In a paratype female of *H. glynni* the pitted area covers only a part of hysteronotum, being situated between the two longitudinal fat grooves and it is absent in front of *d*2 and *d*1; the pits of the shield are small; the propodonotum bears three very small punctate areas behind *sc i*; setae *d*1, *d*2, *d*3 and *d*4 are thick and 50 μ , 87 μ , 108 μ and 63 μ long respectively.

The paratype male of *H. glynni* that we have examined is labelled "Type n. 2853". It is distinguished from the male of our new species by the following characters: Dorsal shield is much shorter, located behind *d*2 and possesses smaller pits; some dorsal setae are much longer: *d*2 60 μ , *d*3 69 μ , *d*4 51 μ ; setae *g m* are located closer to *g a* and *g p*; length of solenidion of tibia I=66 μ and that of tibia II=70 μ . These solenidia are as long or longer than the tarsus, tibia and genu together for the respective legs (apical spine of tarsi not included); tarsi I to IV are much shorter measuring 22 μ , 22 μ , 18 μ and 18 μ respectively (apical spines or pretarsus not included); claws I-IV are about twice shorter, 9 μ , 9 μ , 18 μ and 18 μ long respectively.

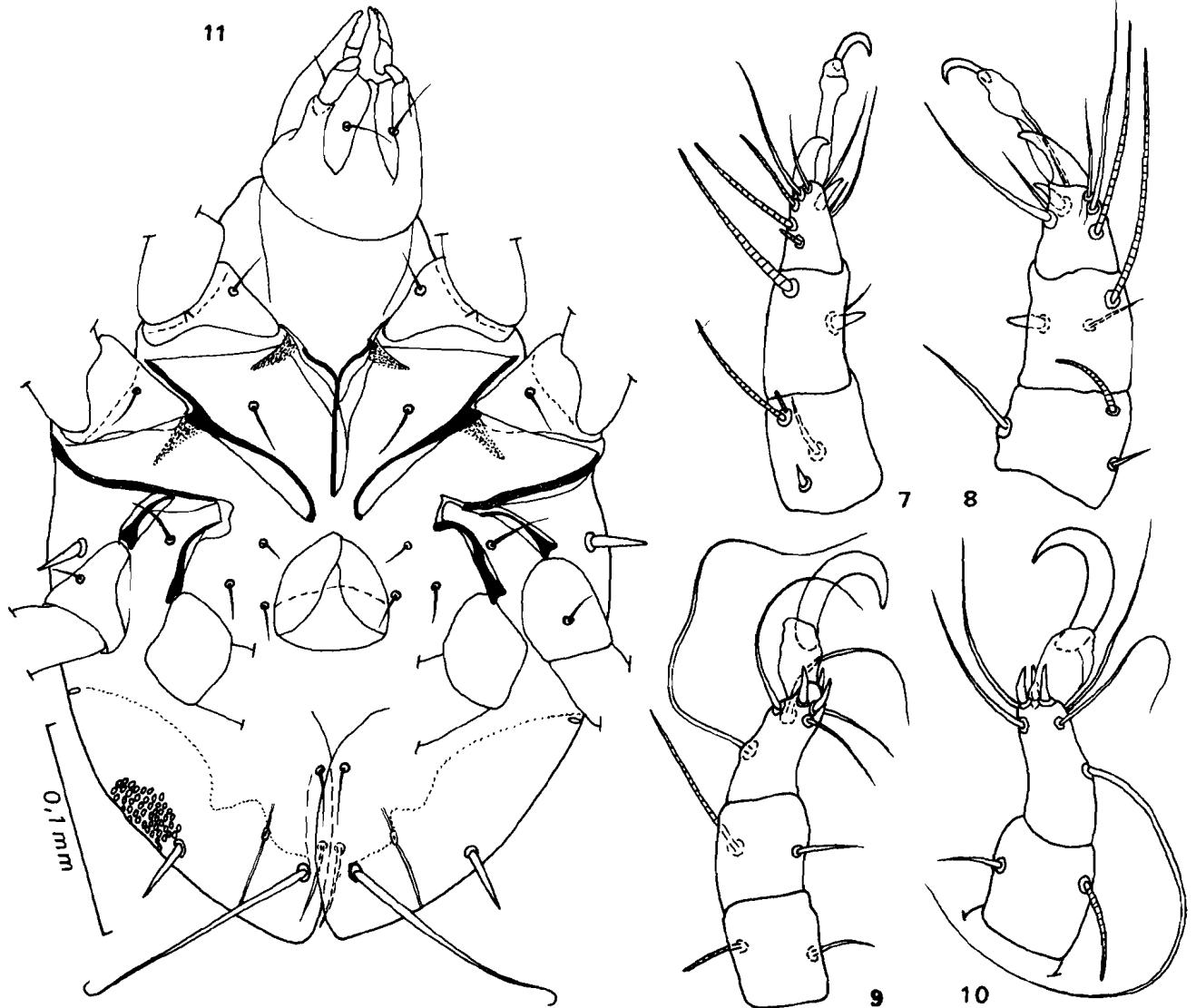
Genus *Amhyadesia* gen. nov.

This genus is distinguished from *Hyadesia* Megnin, 1891 by the presence, in both sexes, of a large punctate dorsal shield involving the hysteronotum and sometimes the propodonotum and extending ventrally to the posterior half of opisthogaster.

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Figs. 1-6: *Amhyadesia californica* sp. n. -1, holotype male dorsally; 2, holotype male ventrally; 3-6, legs I-IV (male).



Figs. 7-11: *Amhyadesia californica* sp. n.—7-10, legs I-IV (female); 11, allotype female ventrally.

Type species—*Hyadesia glynni* Manson, 1963. This genus is, so far, confined to the Nearctic area. The name is a contraction of the names America and *Hyadesia*.

Amhyadesia californica spec. nov.

MALE (Figs. 1-6)—Idiosoma in holotype 435μ long and 305μ wide. In 4 paratypes these measure $495\mu \times 295\mu$, $408\mu \times 291\mu$, $405\mu \times 300\mu$ and $375\mu \times 270\mu$. **DORSUM**: A large, punctate, pitted shield covering greatest part of hysterosoma & about posterior half or two-thirds of median area of propodosoma. Anterior part of propodosoma with a finely punctate shield, wider than long and with a concave posterior margin. Lengths of setae: *sc i* 34μ , *d 1* 29μ , *d 2* 27μ , *d 3* 32μ , *d 4* 36μ , *d 5* 50μ , *l 1* 30μ , *l 2* 33μ , *l 3* 36μ , *l 4* 36μ , *l 5* 155μ , *sh* 39μ , *a* 27μ . Setae *l 4* and *d 5* ventral. Grandjean organ thick and simple, 27μ long. Supracoxal seta (*sc x*) thin, bare and very long (105μ). **VENTER**: As in *H. glynni* but sternum fused with epimerae II. Male organ 39μ wide. Genital setae as in *H. glynni*. **LEGS**: Tarsi I to IV 33μ , 32μ , 33μ and 32μ long

respectively (maximum length, apical spines or pretarsus not included). Claw I to IV 18μ , 18μ , 39μ and 39μ long respectively (measured in straight line, basal part of claw inserted in pretarsus included). Tarsi I-II with a strong apical spine and a much smaller spine inserted apico-ventrally. Tarsus I with a sucker. Tibiae I-II with a thick and short ventral spine. Tibiae III-IV with a fine seta, shorter than width of tibia. Genu I with two unequal solenidia, one 52μ long, other only 8μ . Tarsi III-IV with a subapicoventral sucker, a recurved apical spine, a shorter slightly recurved subapical spine situated posteriorly and 5 fine setae.

FEMALE (Figs. 7-11)—Allotype 370μ long and 268μ wide (maximum width). In 4 paratypes: $445\mu \times 330\mu$, $435\mu \times 295\mu$, $420\mu \times 310\mu$, $390\mu \times 270\mu$. **DORSUM**: As in male but hysteronotal shield large, covering hysteronotum almost completely and setae slightly shorter: *sc i*, *d 1*, *d 2*, *d 3*, *d 4*, *d 5* 32μ , 20μ , 23μ , 24μ , 29μ and 36μ long respectively. Anal seta 24μ long. Epimerae and genital area as in *A. glynni*. Tarsi I-IV 29μ , 29μ , 40μ and 45μ long respectively. Tarsi III-IV with 3 apical spines and 5 simple setae. Claws I-IV: 16μ , 16μ , 36μ , 38μ long respectively. Solenidia as in male.

HABITAT—All the specimens (holotype and 5 male paratypes, allotype and 5 female paratypes, 7 tritonymph paratypes) were found on rocks among green algae, *Rhizoclonium implexum*, in a salinity of 33% and at 21°C , in rocky tide pools just below high tide level. The pools were reached by waves or splash at each high tide.

LOCALITY—Leo Carillow, Beach, California, U. S. A., August 1978 (coll. B. Ganning). Leo Carillo is situated between Santa Monica and Ventura, just north of the border between Los Angeles and Ventura counties. This locality is situated at 380 Km SSE Pacific Grove where *H. glynni* was collected. Holotype is deposited in the U. S. National Museum, Washington, D. C. Paratypes are in the collections of the authors.

ACKNOWLEDGEMENTS

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REFERENCE

- Mancon, D. C. M. (1963). A new species of *Hyadesia* (Acarina: Carpoglyphidae). Proc. Ent. Soc. Wash. 65: 163-167.
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