

A NEW SPECIES OF *LEIPOTHRIX* (PROSTIGMATA : ERIOPHYIDAE) FROM THE COBRA LILY, *DARLINGTONIA CALIFORNICA* (SARRACENIACEAE)

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ABSTRACT - *Leipothrix darlingtoniae* n. sp. (Acarina : Prostigmata : Eriophyidae) is described from specimens collected in the pitchers of the Cobra Lily, *Darlingtonia californica* (Sarraceniaceae), in Oregon, U.S.A.

INTRODUCTION

The insectivorous pitchers of *Darlingtonia californica* Torr. provide a unique habitat for a number of species of arthropods (Fashing 1981, Juniper et al. 1989). The present paper describes a new species of eriophyid mite of the subfamily Phyllocoptinae collected from the inner walls of the pitchers above the fluid (water) line.

All measurements are given in micrometers with the mean followed by the range and sample size in parentheses.

Leipothrix darlingtoniae n. sp.

This species is placed in the genus *Leipothrix* since it possesses a central longitudinal ridge on the dorsum of the opisthosoma and lacks femoral setae (Keifer 1966). In addition, it possesses other characteristics of *Leipothrix* including dorsal tubercles that are set ahead of the rear shield margin, simple featherclaws, and a shield lobe (Boczek, personal communication).

Female - 232 long (208-274; 11), 71 wide (57-79; 11), fusiform, orange in color. Rostrum 24 long (21-26; 4), rostral seta 18 long (14-23; 11); chelicerae 19 long (16-22; 11). Dorsal shield 63 long (59-66; 11), 60 wide (55-67; 4). Dorsal tubercles 17 apart (15-18; 2), 12 ahead of rear shield margin (10-15; 10); dorsal seta 7 long (6-8; 9) and directed centrad. Foreleg 39 long (35-44; 11); genu with seta 34 long (29-37; 11), tibia 9 long (7-10; 11) with seta 3 long (2-4; 9); tarsus 7 long (5-8; 11) with setae 21 long (16-26; 11) and 19 long (11-21; 11); solenidion 6 long (4-7; 11), knobbed;

featherclaw 6 long (5-7; 11). Hindleg 39 long (36-42; 11); genu with seta 12 long (8-17; 11); tibia 8 long (6-9; 11); tarsus 7 long (6-8; 11) with setae 22 long (16-31; 11) and 5 long (4-7; 10); solenidion 6 long (5-7; 11), knobbed; featherclaw 6 long (5-8; 9), 4 rays. First forecoxal setae 14 long (13-16; 10) and 16 apart (16-17; 2), second forecoxal setae 26 long (19-39; 10) and 8 apart (8-9; 2), hindcoxal setae 42 long (32-50) and 28 apart (27-28; 2). Opisthosoma with 50 tergites (47-57; 11) and 79 sternites (73-83; 11); lateral seta 21 long (14-29; 11) on sternite 16 (13-18; 11); first ventral seta 29 long (18-36; 11) on sternite 31 (27-35; 11); second ventral seta 18 long (15-20; 11) on sternite 56 (51-59; 11); third ventral seta 27 long (20-33; 11) on sternite 73 (68-78; 11) (always on sixth ring from rear). Accessory setae 6 long (5-9; 11) and caudal setae 59 long (42-65; 11). Genitalia 23 long (20-26; 6) and 24 wide (21-27; 6); coverflap with numerous, short, broken, longitudinal striae; genital setae 16 long (14-18).

Male - 160 long (146-172; 9), 60 wide (55-64; 9), fusiform, orange in color. Rostrum 23 long (21-26; 8), rostral setae 20 long (18-21; 9); chelicerae 18 long (15-22; 8). Dorsal shield 51 long (47-58; 7). Dorsal shield setae 6 long (5-7; 8), directed centrad and 10 ahead of rear shield margin (9-12; 8). Foreleg 34 long (29-37; 8); genu with seta 30 long (27-33; 9), tibia 7 long (6-9; 8) with seta 3 long (2-5; 7), tarsus 6 long (5-7; 8) with setae 18 long (11-20; 9) and 15 long (12-17; 9); solenidion 5 long (4-7; 9), knobbed; featherclaw 6 long (5-7; 9), 4 rays. Hindleg 34 long (33-37; 5); genu with seta 11 long (6-14; 8); tibia 7 long (6-7; 7); tarsus 6 long (4-8; 7) with setae 18 long (12-22; 7) and 4 long (3-5; 6); solenidion 6 long (5-7; 9), knobbed; featherclaw 6 long (5-7; 9), 4 rays. First forecoxal setae 10 long (7-11; 3); second

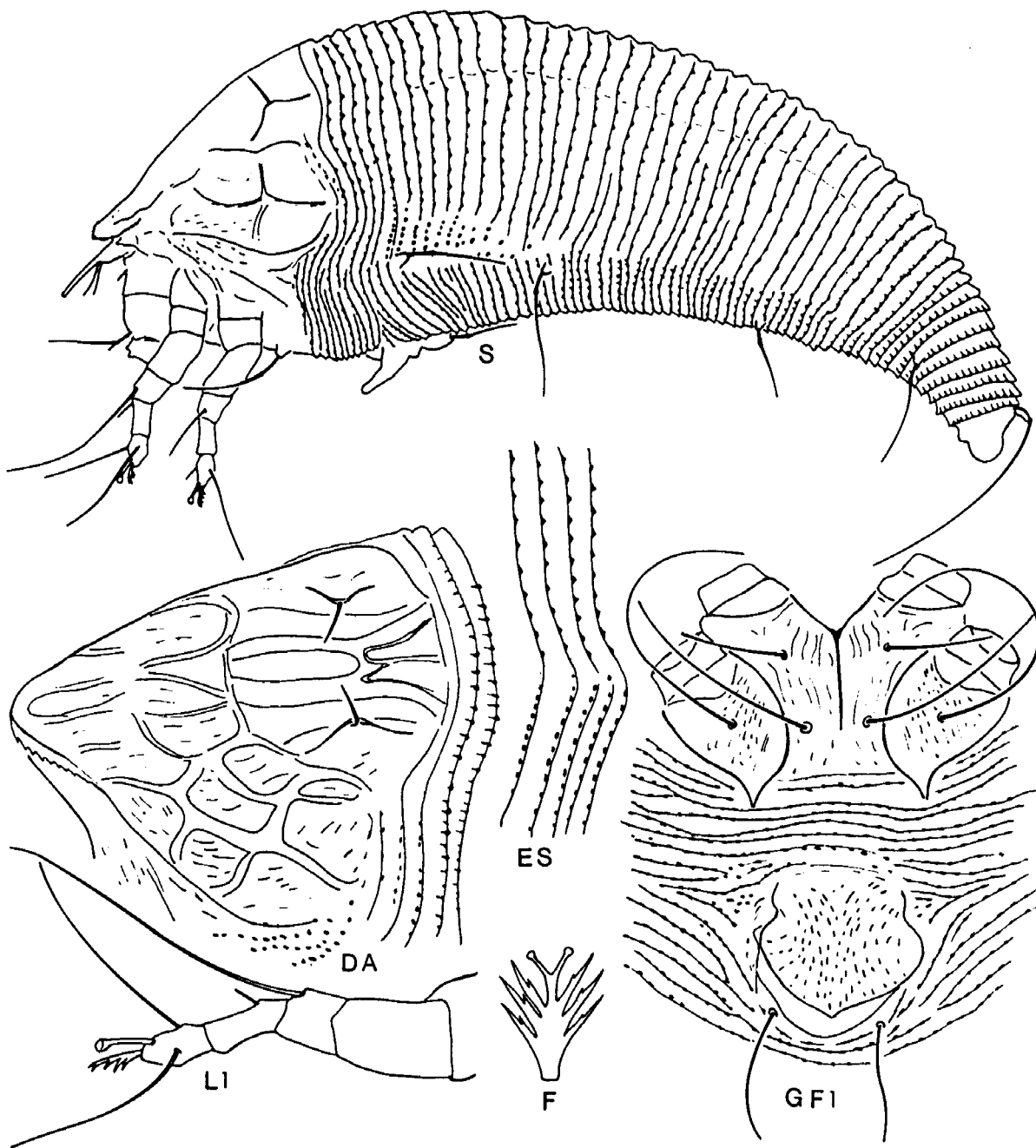


Fig. 1. *Leipothrix darlingtoniae* n.sp. (female) - S lateral view; DA dorsolateral view of shield; ES lateral structures; L1 leg I; F featherclaw; GF1 female genitalia and sternal area.

forecoxal setae 15 long (13-18; 7); hindcoxal setae 28 long (22-35; 7). Opisthosoma with 44 tergites (42-46; 8) and 61 sternites (60-63; 8); lateral seta 15 long (10-20; 9) on sternite 13 (12-15; 8); first ventral seta 20 long (15-23; 9) on sternite 24 (22-25; 8); second ventral seta 14 long (12-16; 9) on sternite 40 (38-42; 8); third ventral seta 23 long (19-25; 9) on sternite 56 (54-58; 8) (always

on sixth ring from rear). Accessory seta 5 long (4-6; 9) and caudal seta 49 long (32-59; 9). Genital seta 12 long (9-14; 9).

Host plant - *Darlingtonia californica* Torr. (Sarraceniaceae).

Relationship to host plant - Found on leaf wall inside of pitcher above the fluid (water) line.

Type material - Holotype female collected on 9 June 1980 at Darlingtonia Wayside, Lane County, Oregon. Paratypes: 2 females with same data as holotype; 8 females and 9 males collected on 18 April 1980 at same locality. Holotype female and male and female paratypes will be deposited in the National Museum of Natural History, Washington, D.C.

The specific name refers to the pitcher plant genus *Darlingtonia*, the plant from which the new species was collected.

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