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NEW SPECIES AND NEW DISTRIBUTIONAL RECORDS FOR MEXICAN *PELONIUM* (COLEOPTERA: CLERIDAE: ENOPLIINAE)

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ABSTRACT. Eight species of *Pelonium*, are now known to occur in Mexico. Three are new: *P. aliciae*, known from Mexico and Guatemala, *P. crurale*, from Mexico, Costa Rica and Honduras and *P. scapulare* from Mexico and Guatemala. Two species, *P. amabile* Spinola and *P. maculicolle* Schaeffer are recorded from Mexico for the first time.

KEY WORDS: Cleridae, Enopliinae, *Pelonium*, Mexican fauna, new species.

Barr, W. F. 2005. Nuevas especies y nuevos registros de distribución de *Pelonium* mexicanos (Coleoptera: Cleridae: Enopliinae). *Folia Entomol. Mex.*, 44 (Supl. 1): 55-62.

RESUMEN. Actualmente se sabe que ocho especies de *Pelonium* ocurren en México. Tres son nuevas: *P. aliciae*, conocida de México y Guatemala, *P. crurale*, de México, Costa Rica y Honduras, y *P. scapulare* de México y Guatemala. Dos especies, *P. amabile* Spinola y *P. maculicolle* Schaeffer, son registradas por primera vez en México.

PALABRAS CLAVE: Cleridae, Enopliinae, *Pelonium*, Fauna de México, Nuevas especies.

The genus *Pelonium* Spinola, 1844: 347 is among the largest, in numbers of species, of the enopliine genera in the New World.

Its species extend from Argentina to the United States, with some showing endemism in the Caribbean area as well as the Galapagos Islands. However, it seems strange that only three species have been reported to occur in Mexico, *P. nigroclavatum* Chevrolat, 1874:326, *P. peninsulare* (Schaeffer, 1917: 132) and *P. spinolai* (Chapin, 1920:54).

It is hoped that this small study which more than doubles the number of known *Pelonium* species in Mexico will also serve as a stimulus for further investigations on the interesting clerid

fauna of this country.

MATERIALS AND METHODS

Collection Labels. Information on collection labels as recorded under the new species is purposely not consistent in sequence of presentation, arrangement and abbreviations. It is intended to follow reasonably closely the format of the individual collector(s).

Measurements. All body and body parts measurements in the descriptions have been made at a uniform magnification of 10X. Thus, the figures can be used for any comparisons deemed to be of interest or use.

The genus *Pelonium* Spinola

In the area under study, the species show a considerable degree of difference, yet the genus can be recognized by the following features:

1. Antenna 11-segmented with the three terminal segments forming a loose club.
2. Antennal segments 9 and 10 subflattened and triangular, lobed or sub-ramiform, depending on sex and/or species.
3. Eyes large, transversely situated and coarsely granulate.
4. Maxillary and labial palpi with terminal segment securiform.
5. Pronotum with a lateral lobe on either side, located slightly behind the middle.
6. Pronotum usually medially asperate behind front margin.
7. Apical half of front margin of protibia toothed, serrate, spiculate, roughened or cristate, and with an apical tooth or angulation.
8. Tarsal claws not toothed, slightly swollen at base and usually with outer margin somewhat angular.
9. Elytra with most of lateral margin not visible from above, deflexed beneath epipleural fold.
10. Longitudinal epipleural fold cristiform or swollen, separated from the lateral margin by the epipleuron.

***Pelonium aliciae* sp. nov.**

(Fig. 1)

Head: piceous; surface finely and very densely punctate, densely clothed with long, erect and suberect pale hairs; width between eyes across frons less than length of scape (10:14); antennal segments 1-8 pale brown, segments 9-11 dark brown with segment 11 paler at apex, segments 2-8 subfiliform, becoming slightly compacted apically, segments 9 and 10 swollen on basal half, with a finger-like ramus that is slightly swollen apically, rounded at apex and exceeding the length of each segment's main attachment

portion, segment 11 elongate, sides somewhat sinuous, apex rounded and skewed, ratios of lengths of segments 1-11, 14: 5: 7: 4: 3: 3: 3: 21: 20: 22; maxillary and labial palpi pale brown. **Pronotum:** piceous, becoming darker laterally; median length subequal to width at lateral lobes (65:62); surface evenly contoured, except for a faint and short, median discal depression behind which a narrow, smooth area extends to hind margin; anterior surface with a large, broadly triangular concentration of asperities, remainder of surface with densely and deeply placed, moderate-size punctations; pubescence consisting of rather long, subrecumbent and suberect, pale hairs on disk and erect hairs laterally; lateral lobes weakly developed, sides behind them nearly linear and narrowing to hind margin. **Scutellum:** brown, flattened, very finely punctate and pubescent. **Elytra:** approximately 3.3 times longer than width across humeri (204:78), broadest at about apical third (96), pale yellow with large, irregularly margined, black or dark brown markings across base, laterally and pre-apical; surface with large, deeply and densely placed punctations on dark markings and the sublateral pale areas, extensive pale area on disk impunctate but slightly roughened, apical pale area rather finely and densely punctate. **Legs:** yellow; profemora with apical third black, protibia with basal fourth black, front margin with basal half slightly roughened, apical half irregularly spiculate, apex with an acute tooth; meso- and metafemora with apical fifth black; meso- and metatibiae with base narrowly black. **Metasternum:** pale brown, finely, densely punctulate, rather densely clothed with pale brown, subrecumbent, posteriorly directed hairs. **Metepisternum:** brown, very densely punctulate and more densely pubescent than metasternum. **Abdomen:** pale brown; surfaces punctulate, densely clothed with subrecumbent hairs similar to those on metasternum, except for a narrow section along the slightly arcuate hind margins of sternites 1-4 that is impunctate and

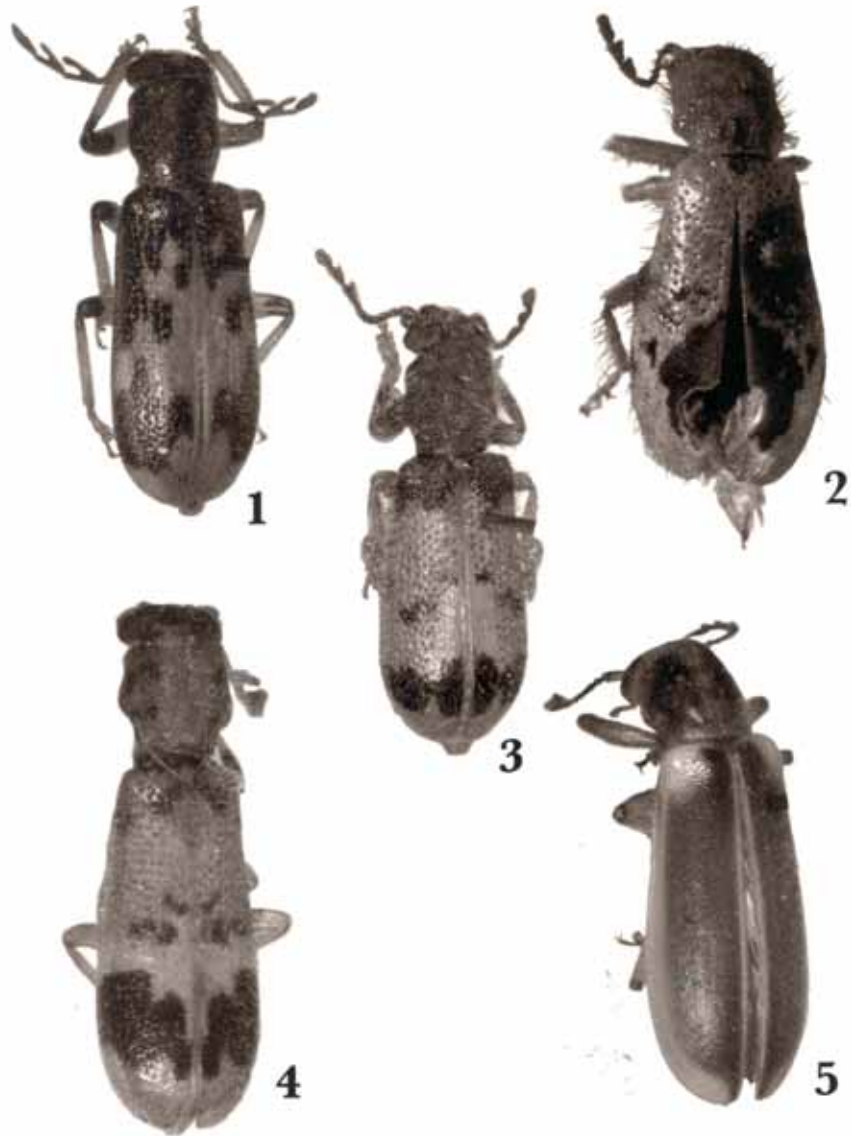


FIGURE 1-5. 1) *Pelonium aliciae* sp. nov., holotype. 2) *P. amabile* Spinola. 3) *P. crurale* sp. nov., holotype. 4) *P. maculicolle* Schaeffer. 5) *P. scapulare* sp. nov., holotype.

devoid of pubescence. **Length:** 14.5 mm.

Holotype: Male, from Est. Biología Chamela, Jalisco, Mex., 9-Julio-98, Col. M. A. Morales (deposited in the Colección Nacional de Insectos, Instituto de Biología, Universidad Nacional Autónoma de México). **Paratypes:** MEXICO: JALISCO: Est. Biología Chamela, 9-Julio-98, M. A. Morales (2 females), VIII-10-90, F. A. Noguera (1 female), VI-20-87, F. A. Noguera (1 female), VIII-14-85, R. A. Usla, (1 female), VI-20-87, F. A. Noguera (1 male), 19°30'N 105°00'0, VIII-9-1999, A. M. Corona (1 female); Estacion Biol. Chamela, 15-23, July 1987 F. T. Hovore, Coll. at UV and MV lights (1 male, 3 females); UNAM Biol. Sta. Chamela, 200', 9 & 16 Aug. 1982, C.W. & L.O'Brien and G. Wibmer, at light (2 males); Est. Biol., VII-8/16-85, at light, J. Chemsak, H. Katsura, A. & E. Michelbacher (1 female), VII-23/31-90, Chemsak, at lights (3 males, 13 females); Estacion Biol. de Chamela, VII-28-90, at light, W. F. Barr, (2 males, 7 females); Est. Biol. Chamela, VII-20/27 and VII-28/VIII-4-1984, J. A. Chemsak, J. T. Doyen, at lights, (2 females); Est. Biol. Chamela, 20-VII and 20/21-VII-1993, 3/4-VIII and 5-VIII-1994, R. L. Westcott (1 male and 3 females); Chamela, 15-7-76, Mario Garcia, (1 male); 15 km N Malaque, VII-21-1992, F. A. Noguera, A luz (1 male); 21 km N Malaque, VI-20-1991, F. A. Noguera (1 female); Malaque-Pto. Vallarta Road, km. 65, at light, 26.7.1990, P. Vogler (1 female); Bahía de Tenocatita, VII-ii-1987, F. A. Noguera (1 female); Tenocatita, VI-24-1978 and VI-17-1990, F. A. Noguera (2 males); Careyes Hotel, Costa Careyes, July 4-7, 1991, J. Rifkind, P. Gum Colls. (1 male, 1 female). GUERRERO: Hwy 200, 51 km NE Ixtapa, VII-18, 21-85, J. E. Wappes (2 males, 1 female); Cacahuamilpa, 17-VI-45, C. Bolivar, (1 male); COLIMA; Manzanillo Penin. Juluapan, 4 km SE El Naranjo, Trop. Decid. For., July 19, 1995 (1 male). OAXACA: 2.7 mi. NW El Cameron, July 24, 1973, taken at light, Maestro & Schaffner (1 female). CHIAPAS: Aguace-

ra, 16 km W Ocoz. 2500', VII-1-7-1986, J. E. Wappes (1 male). GUATEMALA: Zacapa, 12-14 km S Sn. Lorenzo, 1-2000', June 3-6, 1989 (1 female). Paratypes in the collections of: Estacion Biología de Chamela, Essig Museum of Entomology, University of California, Texas A & M Insect Museum, Barr Entomological Museum of University of Idaho, J. Rifkind, F. T. Hovore, J. E. Wappes, R. Turnbow, A. Vogler and W. F. Barr.

Etymology. This species is dedicated to the memory of Alicia Rodríguez-Palafox, an excellent scientist and a gracious lady.

Notes. This is the only species in Mexico that has the male ninth and tenth antennal segments ramiform. Of a more general nature the weakly developed pronotal lobes, distinctive elytral markings (as in fig. 1), pale brown metasternum and the black "knees" (apex of the femora and base of the tibiae) will serve well as recognition features. Specimens examined range in length from 8.5 to 15.5 mm.

Pelonium amabile Spinola

(Fig. 2)

Pelonium amabile Spinola, 1844:362, t. 33, fig. 1; Desmarest, 1860: fig. 182; Gorham, 1883: 189, t. 9, fig. 15; Lohde, 1900:104; Schenkling, 1903:106; Schenkling, 1910:131; Barr, 1975: 17.

Corinthiscus amabilis, Blackwelder, 1944:390; Corporaal, 1950: 285.

Notes. This distinctive species was originally described from Panama and has not been previously recorded from Mexico. The new collection records for this country are: Los Tuxtlas Biological Station, UNAM, Veracruz, 250', IV-21-1983, C. W. & L. B. O'Brien and G. B. Marshall, collectors and Estacion Biol. Los Tuxtlas, Veracruz, IV-29/30-91, F. Hovore.

It is readily recognizable by a pale yellow coloration of the antennae, legs and abdomen; a black scutellum and metasternum and by the pair of

conspicuous, brown, subapical spots on the elytra. It ranges in length from 4.7 to 6.5 mm.

***Pelonium crurale* sp. nov.**

(Fig. 3)

Head: black, upper frons and vertex mahogany colored; surface rather finely, very densely punctate; frons moderately clothed with long pale hairs that appear in disarray and become rust colored on vertex, width between eyes across frons greater than length of scape (15:11); scape brown with upper surfaces partially black, antennal segments 2-8 brown, filiform, segments 9 and 10 blackish-brown, apically enlarged, triangular, apical margin slightly emarginate, segment 11 blackish-brown basally, with apical three-fourths pale, gradually expanded and with apex rounded, ratios of lengths of segments 11: 4: 5: 4: 3: 3: 3: 3: 10: 10: 15; maxillary and labial palpi pale brown. **Pronotum:** black, with a broad mahogany colored marking irregularly extending from front to hind margin and with a small, indistinct mahogany marking at base of each lateral lobe; median length slightly greater than width at lateral lobes (52:48); surface irregularly contoured, with a short, longitudinal depression at middle and a small shallow depression in front of scutellum, both depressions associated with slightly elevated swellings; anterior surface with a narrow median band of asperities, broadly and triangularly situated behind front margin, remainder of surface with densely and deeply placed, moderate size punctations; pubescence consisting of several discal concentrations of rather long, rust colored hairs along front margin to behind middle and long, irregularly directed pale hairs laterally and posteriorly; lateral lobes well developed, margins behind distinctly constricted. **Scutellum:** brown, flattened, very densely clothed with a concentration of erect pale hairs. **Elytra:** nearly three times longer than basal width (195:51), broadest at about apical fourth (79), yellow with three sets of markings: an irregular, mahogany basal band, margined laterally

and posteriorly with black, a cluster of six independent, small, irregular black discal spots at about middle, appearing to be somewhat associated with a tiny, sublateral black spot and with a large, irregularly margined, transverse subapical marking; surface with large, deep, semistriate punctations that extend to hind margin of subapical black marking, except for a large, subrectangular non-punctate area bordering the suture which is somewhat roughened and micro-punctulate; pubescence rather long and sparsely placed, erect and suberect, pale in color with hairs on basal marking rusty in color; deflexed lateral margins finely cristiform, reddish in color; epipleura narrow, except widened at base, and concave; epipleural fold finely cristiform, joining lateral margin about in line with hind margin of third abdominal segment. **Legs:** yellowish; profemur with a large, subapical black marking; protibia with a subbasal black band, front margin feebly toothed on apical half and with an apical, subrectangular tooth; meso- and metafemora with a postmedial black band. **Metasternum** and metepisternum: black, finely punctulate, sparsely clothed with short, suberect white hairs. **Abdomen:** sternites 1-4 black, with hind margins narrowly brown and with a large, brown lateral spot; surfaces shiny and smooth, clothed with short, subrecumbent white hairs; sternites 5 and 6 yellowish, strongly narrowing, surfaces densely micro-punctate, clothed with short, recumbent yellowish hairs, hind margin of sternite 5 broadly arcuate, of sternite 6 slightly arcuate. **Length:** 10.9 mm.

Holotype: male, from Turrialba, Costa Rica, IX-29, F. Nevermann, (deposited in the Field Museum of Natural History, Chicago, Illinois). **Paratypes:** MEXICO: CAMPECHE: 186 nr. Pital, 11-VI-1990, F, W, Skillman, Jr., beaten from burned slash (2 females); QUINTANA ROO: 66 km E Xpujil, 19-VI-1990, M. C. Thomas (1 female); 5 km S Morocoy, 19-VI-1990, R. Turnbow (1 male), VERACRUZ: 5 km S Fortin, 1175 m, VII-17-90, J. Doyen (1 fema-

le); Est. Biol. de los Tuxtlas, 18°35'N, 95°05'W, 29-IV and 4-V-1991, H. A. Hespenheide (2 males). COSTA RICA: Cartago Prov., 12 km N Pavones, 27-XII-1989, F. Hovore (1 female). HONDURAS: Francisco Morazan, 23.8 km SSW Telanga, 3-VI-1993, R. Turnbow (1 female); Francisco Morazan, Zamorano, 23-V-02, R. Turnbow (1 female); El Paraiso, Yuscaran, Cerro Monsarrat, Mar 10-31-1993, R. Ortega (1 male). Paratypes in the collections of H. A. Hespenheide, Essig Museum of Entomology, University of California, R. Turnbow, Frank Hovore, J. Rifkind and W. F. Barr.

Etymology. From the Latin *cruralis* (of the leg), in reference to the distinctive banding of the femora.

Notes. Distinctive features for this species a median black band on the meso- and metafemora, the pronotal pubescence being rust colored on the disc and whitish laterally. Also, a short median depression on the pronotum is evident. Specimen length ranges from 8 to 12.5 mm.

***Pelonium maculicolle* Schaeffer**

(Fig. 4)

Pelonium maculicolle Schaeffer, 1904:219; Barr, 1975:17.

Cregya maculicollis, Wolcott, 1910:388.

Corinthiscus maculicollis, Leng, 1920:151; Wolcott, 1947:86; Corporaal, 1950:289.

Notes. This species, described from Brownsville, Texas in the lower Rio Grande (= Rio Lobo) Valley, certainly should occur on the Mexican side of this river. However, no specimens have as yet been seen from the area. Therefore, it was a surprise to see recently, a specimen of this very distinctive species with the following label: Estacion Biol. Los Tuxtlas, Veracruz, Mex. IV-20/30-1991 F. Hovore.

Pelonium maculicolle is readily recognized by its pale reddish coloration of the head and pronotum that is accompanied with black markings, the elytra are tan on the basal 3/5ths and whitish on the apical 2/5ths, the tan area is coarsely punctate

and the whitish area is finely punctulate, both areas contain black markings as well. The metasternum is black and the abdomen pale yellow, also the legs are pale yellow, except that the femur of the front legs has a subapical black band and the tibia of these legs has a subbasal black band.

***Pelonium scapulare* sp. nov.**

(Fig. 5)

Head: pale brown, becoming darker behind eyes; surface finely, densely punctate, densely clothed with rather short, pale brown hairs, width between eyes across frons much less than length of scape (10:15); antenna with scape longitudinally triangular in cross section, yellow on lower surface and one upper surface, third surface black with an elongate pale suffusion, antennal segments 2-8 shining black, filiform, segments 9 and 10 dull black transversely expanded apically, with outer angle forming an elongate triangular projection that extends beyond the segments' terminus, segment 11 gradually expanded and subparallel, broadest at about middle, with one side arcuate and the other sinuate, apex narrowly rounded and skewed, ratios of lengths of segments 1-11 (15:6:8:4:4:4:3:3:17:15:21); maxillary and labial palpi pale brown. **Pronotum:** reddish-brown with anterior margin pale brown, becoming yellowish at anterior angles and with a pair of large, elongate, black discal spots extending from behind front margin to in front of hind margin; median length greater than width across median lobes (73:57); disk evenly rounded; anterior surface with a triangular concentration of asperities, remainder of surface with densely and deeply placed punctations of moderate size, pubescence dense, of moderate length, erect and suberect, tan in color, but not obscuring surface, hairs of frontal areas and mid-line directed posteriorly; lateral lobes moderately developed, margin behind them distinctly constricted. **Scutellum:** pale brown, flattened, without a concentration of hairs. **Elytra:** less than three times lon-

ger than width across humeri (215:80), dark brown with humeral areas pale yellow which extends as a broad lateral stripe nearly to apices, sutural margins narrowly pale yellow, not joining lateral stripe; surface on anterior half densely, deeply, rather finely punctate, except for impunctate humeri, becoming more densely and finely punctate on apical half, pubescence dense, short, tan in color and directed posteriorly, except for a few, scattered, erect and slightly darker hairs; deflexed lateral margins finely cristiform, reddish in color; epipleura very narrow except at base below humerus where it is broadened and distinctly concave; epipleural fold well developed, rounded and impunctate, joining lateral margin about in line with hind margin of first abdominal segment. **Legs:** yellowish, tarsi black dorsally; profemora with apical third blackish, protibia with basal half and extreme apex black, apical half of front margin subspiculate, apex with a triangular tooth; meso- and metafemora with apex narrowly black; meso- and metatibiae with a narrow black band at base and at apex. **Meta-sternum** pale brown with sides darker at apex, surface finely, sparsely punctate, rather densely, but indistinctly clothed with short, suberect pale hairs. Metepisternum blackish brown, surface densely punctulate, densely clothed with short, subrecumbent pale hairs. **Abdomen** sternites 1-4 blackish-brown, with hind margins narrowly brown and with a large, brown sublateral spot, surfaces very finely punctulate and densely clothed with short, recumbent, pale brown hairs; sternite 5 brown laterally, surface more densely pubescent; sternite 6 nearly smooth and glabrous, apical margin broadly arcuate. **Length:** 14.2 mm.

Holotype (sex uncertain): from 8 km S San Blas, Bahía Matachen, Nayarit, 16-VII-1995, F. A. Noguera y A. Rodríguez (deposited in the Colección Nacional de Insectos, Instituto de Biología, Universidad Nacional Autónoma de México). **Paratypes:** MEXICO: CHIAPAS: 17 km W Tuxtla Gtz., 8300', VII-1-8-1986, J. E. Wappes (2 specimens); GUERRERO: 51 km NW Ixtapa,

18 July 1985, mv + bl (1 specimen); JALISCO: Est. Biol. Chamela, VII-13/22-1992, J. Chemsak (1 specimen); QUINTANA ROO: 15 km S Morocoy, June 19, 1990, R. Turnbow (1 specimen); Leona Victoria, VI-5-1992, F. Hovore (1 specimen); VERACRUZ: La Playa Escondida, La Tuxtla, 23 March 1980, S. Kaiser, G. Bezark (1 specimen); YUCATAN: 20 km NE Felipe Carrillo Puerto, VI-3-1992, F. Hovore (1 specimen); 16-17 km NE Felipe Carrillo Puerto, VI-1-1992, F. Hovore (1 specimen). GUATEMALA: Pelen, Tikal, 14 and 17-May-1956, T. H. Hubbell (3 specimens). Paratypes in the collections of The Essig Museum of Entomology, University of California, The University of Michigan, F. Hovore, J. Rifkind, R. Turnbow, J. E. Wappes and W. F. Barr.

Etymology. From the Latin, *scapula* (shoulder blade) in reference the humeri of this species which are distinctively yellow.

Notes. This species belongs to a species group that occurs in parts of Central America and South America. Thus far, this is the first member of the group to be recorded from Mexico. The most noticeable features include a pair of large, elongate, black spots on the evenly rounded pronotal disc, an elongated and rounded epipleural fold on each side of the elytra, black antennal scape, dorsally black tarsi and the elytra that are densely punctate with the apical half more finely punctate than the basal half.

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Barr: New species and distributional records for Mexican Pelonium

Noguera, Estación de Biología Chamela; Jacques Rifkind, Valley Village, CA; Robert Turnbow, Fort Rucker, AL; J. E. Wappes, Bull Verde, TX and R. L. Westcott, Salem, OR.

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