

Apionidae from North and Central America. Part 6.
Description of new species of *Apionion* Kissinger,
Coelocephalapion Wagner and *Trichapion* Wagner (Coleoptera)

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Abstract. Two new species of *Trichapion* Wagner, *T. baranowskii* and *T. santaritae*, are described from Madera Canyon, near Tucson, Arizona. Six new species of *Coelocephalapion* Wagner are described: *C. dilox* (Mexico), *C. goldilox* (Costa Rica, Panama), *C. johnsoni* (Panama) with host *Vatairea erythrocarpa* Ducke (Fabaceae), *C. nirostrum* (Mexico), *C. tellum* (Texas, Mexico), and *C. turnbowi* (Mexico). *Apionion opetion* is described from Mexico. A closely similar species, *Apionion bettyae* (Kissinger), new combination, with probable host plant *Lonchocarpus* sp. (Fabaceae), is transferred from *Trichapion*.

Introduction

Even though about 340 species of apionids are described from North and Central America, Whitehead (1977) believed that less than 10% of the Central American apionid fauna was known. During the past 30 years I have determined some 50,000 apionids from Central America. I know that the number of apparently new species is large, but an estimate of 2,000-3,000 new apionids awaiting description from the area is, hopefully, a somewhat inflated upper limit.

The new species are referred to species groups defined in Kissinger (1968). This reference placed all New World members of the subtribe Apionina in *Apion* Herbst and various subgenera and species groups, some subsequently elevated to genera in Kissinger (1992, 1998) following the lead of Alonso-Zarazaga (1991). Consequently, the interpolation of new species into a key from Kissinger (1968) may require the contrast of species from two genera in a couplet.

Codons for collections are from Arnett *et al.*, 1993, with the addition of "RHTC" for Dr. R.H. Turnbow, Ft Rucker, Alabama. Procedures follow those in Kissinger (1968, 1990).

Genus *Trichapion* Wagner

Trichapion baranowskii Kissinger new species (Figures 27-34)

Holotype. Male 1.767mm long; 0.823mm wide. Dark piceous. Vestiture white, fine, sparse, uniform

on dorsum; slightly coarser laterally. Rostrum 0.579mm long; 1.32 as long as prothorax; surface polished throughout, sparse scales 0.030-0.040mm long in basal 0.67, deep, fine punctures (0.010-0.020mm diameter) occur in rows to near apex; dorsal submedial sulcus indicated on frons by 2 or 3 rows of punctures bearing scales, continuing onto rostrum as single row of punctures and scales; dorsal sublateral sulcus indistinctly impressed on metarostrum, bearing distinct scales in basal 0.67 of rostrum; ventral sublateral sulcus shallowly impressed in basal half, with distinct scales in basal 0.7; in profile slightly curved; pronotum in profile tapers irregularly to tip, in dorsal view sides nearly parallel in apical 0.5; antenna inserted at basal 0.28 of rostrum at distance in front of eye 1.12 width of frons; dorsal margin of scrobe evenly descending. Head with frons 0.146mm wide; 1.57 as wide as dorsal tip of rostrum; with moderately deep median sulcus; dorsal margin of head distinctly declivitous above posterior margin of eye; subcephalic ridge high, with high basal margin; with distinct transverse cusp on ventral surface behind the basal margin, cusp visible in profile. Prothorax 0.439mm long, at base 1.25 as wide as long; basal margin moderately expanded laterally, pronotum sides approximately parallel in basal 0.5, punctures 0.020-0.040mm in diameter, moderately deep, bearing fine scales 0.042-0.058mm long, scales tend to taper to acute point; interspaces irregular, narrow, alutaceous; on ventral flanks scales tend to be coarser and more roundly truncate. Elytra intervals about 2X striae, with 2 rows of scales, in basal half scales similar to those on pronotum, apically scales shorter, broader and more rounded,

may be interspersed among fine, acute ones; intervals nearly flat, finely alutaceous; striae moderately coarse, deep, scales similar to those on adjacent intervals; intervals 7 and 9 each with 1 long sensory seta, interval 3 with 1-2 short sensory setae in apical 0.3. Tibia 1 inner anterior aspect with flattened glabrous area extending about 0.58 length of tibia, area polished, smooth, somewhat iridescent. Tibiae 2 and 3 mucronate.

Paratypes. Length 1.790-2.170mm, width 0.860-1.080mm. Rostrum of male 0.560-0.600mm long; 1.14 to 1.27 as long as prothorax; male antenna inserted at basal 0.28-0.29 of rostrum at distance in front of eye 0.94-1.06 width of frons. Rostrum of female 0.580-0.730mm long; 1.21-1.43 as long as prothorax; rostrum abruptly narrowed in region of antennal insertion, in profile dorsal margin at this location is slightly but distinctly declivitous (an abrupt slope of about 0.009mm); in dorsal view with sides parallel at tip, punctures as described for male extend to near apex, basal 0.3 with sparse scales finer and shorter than those basad of antennal insertion, apical 0.67 with very short, extremely fine setae, nearly glabrous; female antenna inserted at basal 0.20-0.25 of rostrum at distance in front of eye 0.83-1.05 width of frons. Head with frons 0.140-0.170mm wide; 1.55-2.98 as width as dorsal tip of rostrum. Prothorax 0.430-0.530mm long; at base 1.12-1.27 as wide as long. Elytra at humeri 1.34-1.44 as wide as prothorax at base; 2.47-2.90 as long as prothorax; 1.24-1.45 as long as wide. Male characters: Tibia 1 inner anterior aspect with flattened glabrous area extending about 0.6-0.7 length of tibia. Tibiae 2 and 3 mucronate; mucro 2 0.057mm long, with ventral rounded prominence; mucro 3 0.025mm long, subangulate ventrally. Median lobe of aedeagus in profile slightly produced on ventral margin at apex; in dorsal view width at base of basal apodemes 0.050mm, sides nearly parallel from base to near middle, slightly diverging to orifice (width 0.070mm), gradually narrowed to blunt apex (width 0.033mm). Base of endophallus with mass (about 0.085mm long) of fine, spikelike structures, individual spikes may be up to 0.057mm long but exact length, number and arrangement not determined; near orifice with 3-5 teeth 0.014-0.028mm long. Tegmen parameroid lobes broad, long, membranous, lack macrosetae, fenestrae separated; free ring of basal piece articulated with short projection from basal plate; basal plate flat medially.

Material examined. Holotype. Arizona: Cochise Co, Mile High Preserve, Ramsay Canyon,

12 km S Sierra Vista, 1700 m, 11-18 Jun 1986, BV Brown, Malaise, Oak/Juniper riparian forest (CASC). Paratypes (21 total). 6, Arizona: Santa Rita Mts, Madera Canyon, near Bog Springs campground, Aug 22 1988, sweeping in mixed oak forest, leg R Baranowski (MZLU, DGKC); 6, Arizona: Santa Rita Mts, Madera Canyon, Bog Springs Campground, 5000 ft; Aug 24 1988, evening sweeping in oak forest, leg R Baranowski (MZLU, DGKC); 2, Arizona: Santa Cruz Co, Madera Canyon, May 17 1990, DG Kissinger (DGKC); 6, Arizona: Pima Co, Madera Canyon, Bog Springs campground, 15 Aug 1991, DG Kissinger (DGKC); 1, Arizona: Pima Co, Madera Canyon, Proctor Road, 25 July 1989, R Turnbow (RHTC).

Etymology. Named in honor of R. Baranowski, one of the first collectors of this species.

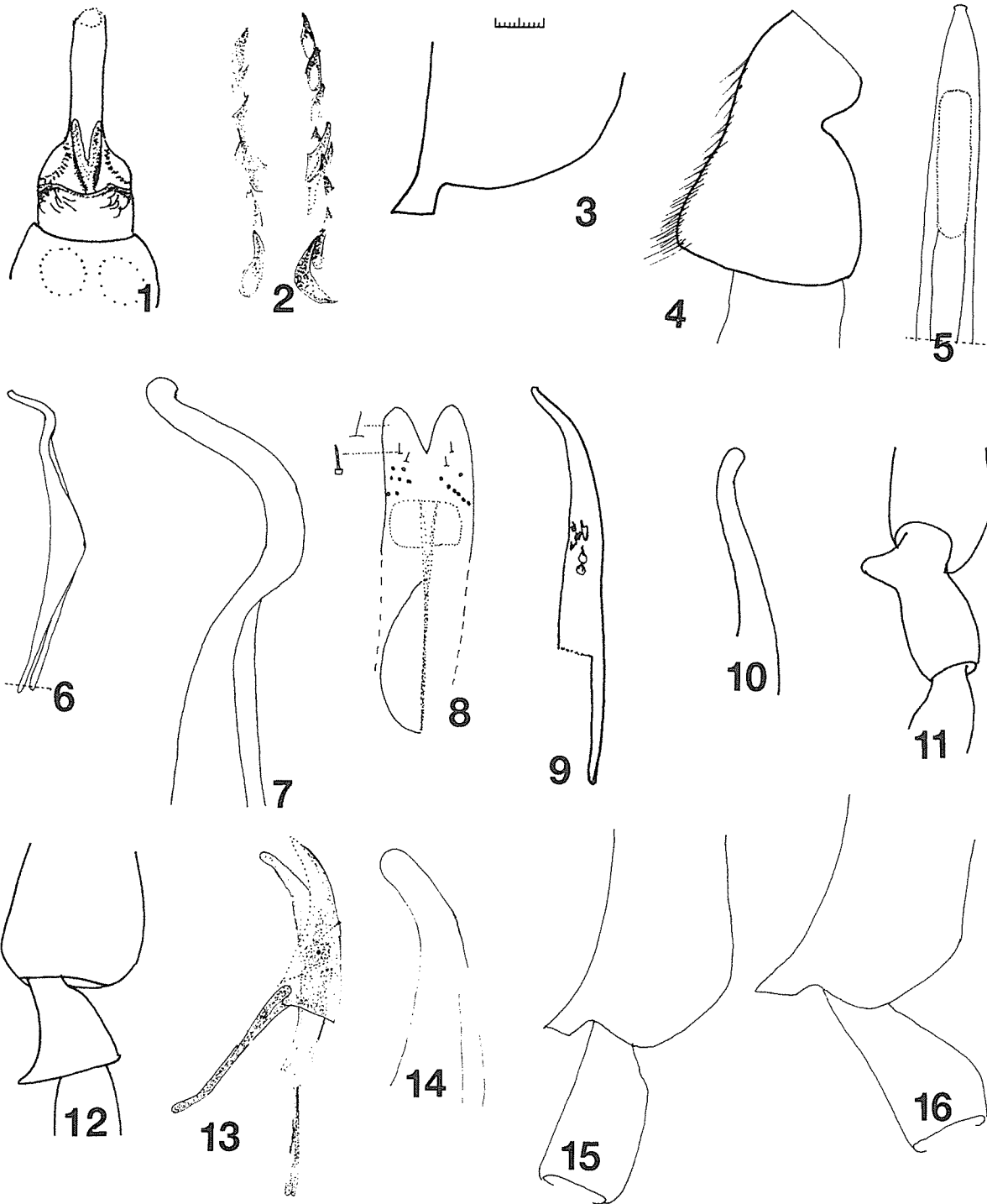
This species belongs to the *aurichalceum* species group; *T. aurichalceum* (Wagner) is the type species of *Trichapion*.

The species can be placed in the "Key to males of the species of the *Apion* subgenus *Trichapion* occurring in North and Central America" in Kissinger (1968) as follows:

36. Rostrum in profile tapered in apical 0.5 36A.
Rostrum in profile nearly cylindrical in apical 0.3;
tibial mucrones project at angle with longitudinal
axis of tibia; DC - FL
..... *Trichapion novellum* (Fall)
- 36A. Tibial mucrones 2 and 3 project in line with tibia;
subcephalic ridge low; elytral interval 3 with 1
row of scales; CO, NE, GA
..... *Trichapion nebraskense* (Fall)
- Tibial mucrones 2 and 3 project at angle with
longitudinal axis of tibia; subcephalic ridge high,
area with distinct posterior margin; elytral inter-
val 3 with 2 rows of scales; AZ
..... *Trichapion baranowskii* Kissinger

***Trichapion santaritae* Kissinger
new species
(Figures 35-44)**

Holotype. Male 1.900mm long; 0.759mm wide. Piceous, antenna except club, tip of tibiae and tarsomeres 1 and 2 testaceous; vestiture sparse, fine, white, nearly uniform on dorsum, somewhat more apparent on pro, meso, and metathorax and metepisternum, much more prominent and longer under eye. Rostrum 0.457mm long; 1.09 as long as prothorax; surface finely alutaceous, with sparse,



Figures 1-16. *Coelocephalapion tellum* Kissinger. 1) head, ventral view. 2) armature of endophallus. *Coelocephalapion johnsoni* Kissinger. 3) apical region of tibia 2 of male, lateral view. 4) tarsus 3 tarsomere 1 of male, dorsal view. 5) median lobe of aedeagus (anterior part deformed by pressure of cover slip), dorsal view. 6) median lobe of aedeagus, lateral view; dashed line corresponds to that on fig. 5. 7) detail of apical region of median lobe of aedeagus, lateral view. 8) paramere of tegmen of male genitalia, dorsal view. *Coelocephalapion dilox* Kissinger. 9) median lobe of aedeagus, lateral view. *Coelocephalapion turnbowi* Kissinger. 10) apical region of median lobe of aedeagus, lateral view. 11) tarsus 2 tarsomere 1 of male, lateral view. 12) tarsus 3 tarsomere 1 of male, lateral view. *Coelocephalapion nirostrum* Kissinger. 13) median lobe of aedeagus and tegmen, lateral view. 14) detail of apical region of median lobe of aedeagus, lateral view. 15) tarsus 2 tarsomere 1 of male, lateral view. 16) tarsus 3 tarsomere 1 of male, lateral view. Scale = 0.027mm. for Fig. 2, 10, 14, 15, 16; 0.054mm for Fig. 3, 4, 7, 11, 12; 0.110mm for Fig. 8, 9, 13; 0.185mm for Fig. 1; 0.200mm for Fig. 5, 6.

minute punctures with distinct scales up to 0.036mm long in basal 1/2, apical 1/3 polished, glabrous, impunctate; in dorsal view sides slightly expanded at antennal insertion, nearly evenly, slightly converging to apical 1/3, in apical 1/3 sides nearly parallel; in profile slightly curved, sides nearly parallel in apical 1/3, depressed at tip; antenna inserted at basal 0.34 of rostrum at distance in front of eye 1.70 width of frons; dorsal margin of scrobe nearly evenly descending to base of rostrum, then merged with ventral surface of head. Head with frons 0.091mm wide, 1.00 as wide as dorsal tip of rostrum, with 1 sublateral, somewhat confused row of punctures bearing scale 0.036-0.055mm long, separated by moderately wide median area with more or less distinct but shallow sulcus; in profile dorsal margin of frons moderately convex; eye distinctly longer than wide, subcephalic ridge low, not reaching middle of eye (hard to see because of vestiture). Prothorax 0.420mm long, at base 1.09 as wide as long; basal margin distinctly produced laterally, sides beyond basal margin rounded slightly to widest point near middle, rounded to constricted apex; in profile pronotum slightly convex; pronotal punctures shallow, 0.010-0.030mm in diameter, with fine acuminate scales 0.040-0.060mm long; interspaces flat, moderately wide, finely, sparsely alutaceous. Elytra at humeri 1.40 as wide as pronotum base; 2.99 as long as prothorax; 1.65 as long as wide; intervals slightly convex, at middle more than 2X as wide as striae, with 1 row of scales (somewhat confused) similar to pronotal scales; striae moderately deep, moderately fine, with scales similar to those on adjacent intervals; intervals 7 and 9 with 1 long sensory seta. Tarsus 1 with tarsomere 1 broadly oval, depressed into flat disk; tibia 1 slightly enlarged to nearly cylindrical apical one-half, profile of outer margin broadly convex; femur 2 grotesquely enlarged in vertical dimension, compressed, near base ventral margin angularly expanded to about 1.4 width of femur 1; tibia 2 in profile somewhat convex on outer margin, with mucro 0.080mm long; tarsi 2 and 3 with tarsomere 1 elongate, about 1.2 as long as tarsomeres 2 and 3 combined.

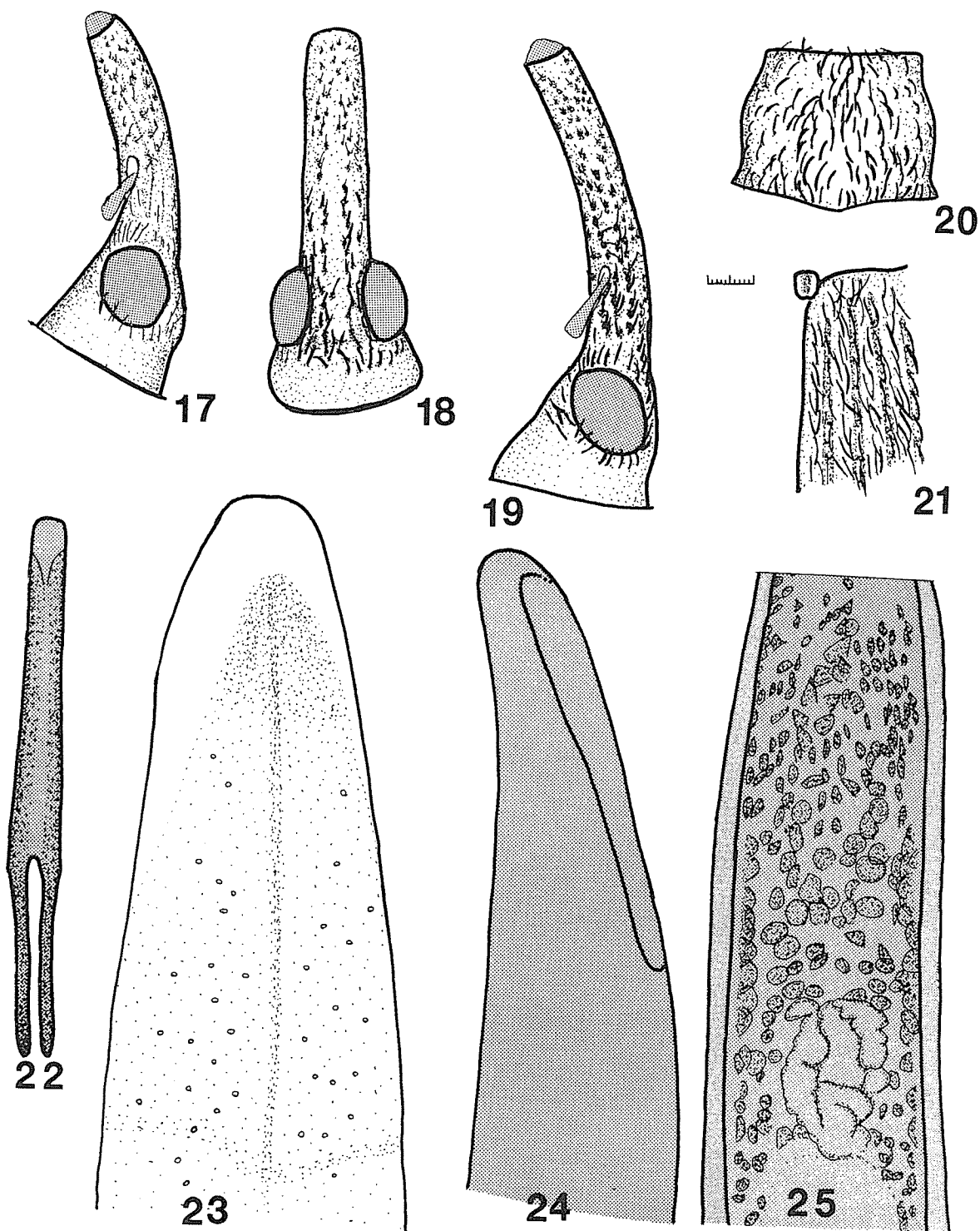
Paratypes. Female piceous throughout. Length 1.900-2.180mm; width 0.760-0.980mm. Rostrum of male 0.457-0.510mm long; 1.08 to 1.18 as long as prothorax; antennae inserted at basal 0.29-0.34 of rostrum at distance in front of eye 1.56-1.70 width of frons. Rostrum of female 0.420-0.640mm long; 1.00 to 1.47 as long as prothorax; nearly glabrous (with several minute scales basad of antennal insertion),

surface minutely alutaceous, with minute sparse punctures, apical region smoother; in profile distinctly curved, sides nearly parallel in apical 2/3; in dorsal view slightly expanded at antenna insertion; antenna inserted at basal 0.22-0.35 of rostrum at distance in front of eye 1.17-1.34 width of frons. Head with frons 0.090-0.130mm wide, 0.63-1.08 as wide as dorsal tip of rostrum; eye of female nearly round. Prothorax 0.420-0.46mm long; at base 1.08-1.18 as wide as long. Elytra at humeri 1.35-1.50 as wide as prothorax at base; 2.86-3.17 as long as prothorax; 1.54-1.65 (male) and 1.37-1.52 (female) as long as wide. Median lobe of aedeagus moderately slender, somewhat depressed; in profile apex simple, turned down, about 0.160mm in width, sides gradually converging from orifice to near apex; in dorsal view apex narrowed to moderately fine tip; endophallus lacks sclerotized elements. Tegminal plate comparatively large (looks like it is too large for the median lobe), narrowly oval; parameroid lobes membranous, moderately long, lacking macrochaetae, small sensillae present; fenestrae joined medially; no distinct basal lateral projection to articulation with free ring of basal piece; basal plate flat.

Material examined. Holotype. Arizona: Pima Co, Madera Canyon, 30 Sep 1989, DG Kissinger; measured 00313 DGKissinger (CASC). Paratypes (64 total). 2, same data as holotype (DGKC); 1, Arizona: Pima Co, Madera Canyon, turn off to Bog Springs, 15 Aug 1991, DG Kissinger (CDAE); 53, Arizona: Santa Cruz Co, Madera Canyon, 17 May 1990, DG Kissinger (DGKC, CDAE); 6, Arizona: Cochise Co, Mile High Preserve, Ramsay Canyon, 12 km S Sierra Vista, 1700 m, 6-13 July 1986 or 13-23 Aug 1986 or 15-22 Oct 1986 or 9 July 1987, BV Brown, Malaise, Oak/Juniper riparian forest (CDAE); 1, Arizona: Cochise Co, Huachuca Mts, Miller Canyon, 9-10-Sep-1968 (TAMU); 1, Mexico: Veracruz: 7.3 mi E Naranjos, 20 Sep 1976; WE Clark (TAMU).

Etymology. Named for the Santa Rita Mountains, the type locality.

This species is in the *spinitarse* species group. The male is like no other apionid with parts of the legs testaceous, tarsus 1 tarsomere 1 enlarged into a flattened ovate disk; tibia 2 mucronate; femur 2 grotesquely enlarged; and tarsi 2 and 3 with tarsomere 1 elongate. The female is distinct with its nearly glabrous, relatively short, strongly curved rostrum. Both sexes tend to have the pronotum roundly widened to the widest point at the middle.



Figures 17-25. *Coelocephalapion goldilox* Kissinger. 17) head of male, lateral view. 18) head of male, dorsal view. 19) head of female, lateral view. 20) pronotum, dorsal view. 21) scutellum and base of right elytron, dorsal view. 22) median lobe of aedeagus, dorsal view. 23) apical region of median lobe of aedeagus, dorsal view. 24) apical region of median lobe of aedeagus, lateral view. 25) basal region of median lobe of aedeagus and tegmen, dorsal view, orifice to top of page. Scale = 0.018mm for Fig. 23, 24, 25; 0.073mm for Fig. 22; 0.100mm for Fig. 17, 18, 19, 20, 21.

The "Key to males of the species of the *Apion* subgenus *Trichapion* occurring in North and Central America" (Kissinger, 1968) should be modified as follows:

7. Tarsus 1 tarsomere 1 produced into rounded flat lobe or disc. 7A
Tarsus 1 not so modified 8
- 7A. Tarsi same color as femur; tarsus 1 tarsomere 1 with inner margin strongly rounded from base to apex, forming broad, rounded lobe projecting distally beyond apex of tarsomere; in dorsal view inner part of tarsomere much broader than outer part; femora 1 and 2 similar in width; Mexico (Veracruz)
..... *Trichapion mirificum* (Kissinger)
Tarsomeres 1 and 2 testaceous compared with piceous femur; tarsus 1 tarsomere 1 produced into flat, oval disk; femur 2 much more robust than femur 1; AZ, Mexico (Veracruz)
..... *Trichapion santaritae* Kissinger

***Trichapion digenerum* (Kissinger)**

This species has tarsomere 1 of tarsus 3 produced into a spine that may be addressed to the next tarsomere, a fact overlooked in Kissinger(1968).

***Trichapion novellum* (Fall)**

New locality: Florida: St. Lucie Co., Ft. Pierce, 25-April-1989, J. Malukiewicz, *Vigna* sp. (FSCA).

Genus *Coelocephalapion* Wagner

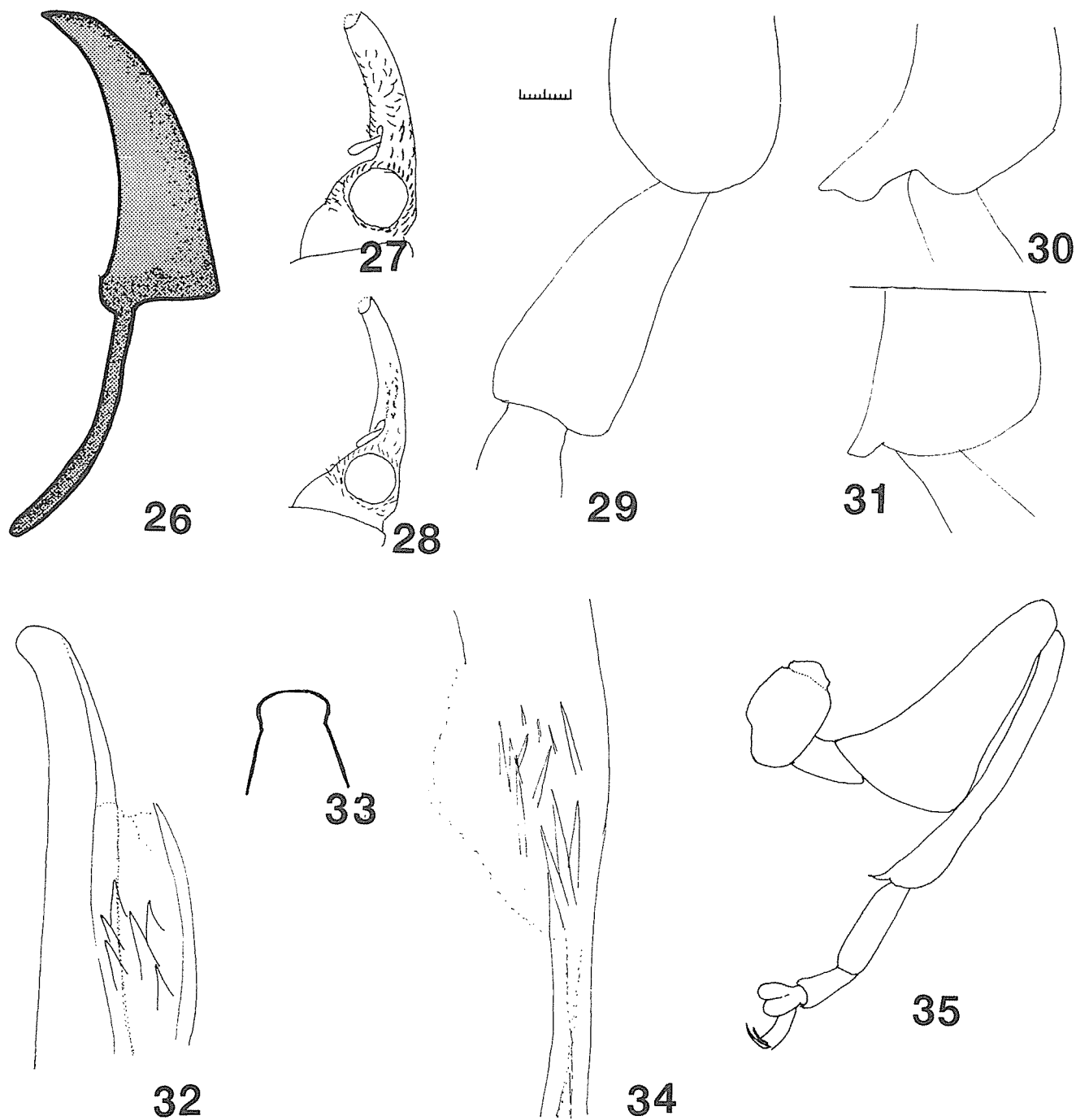
***Coelocephalapion goldilox* Kissinger
new species
(Figures 17-26)**

Holotype. Male 1.786mm long; 0.841mm wide. Piceous with slight bronze luster; coxae 1 and 2 and legs (including trochanter) testaceous; antenna dark testaceous. Vestiture golden, fine, moderately sparse, uniform on pronotum and elytra; sparser, finer and shorter on head, thorax and sterna. Rostrum of male 0.548mm long, 1.50 as long as prothorax; nearly cylindrical, slightly expanded at insertion of antennae; basal 3/4 with surface slightly alutaceous, with fine, moderately dense punctures bearing scales 0.018-0.040mm long; apical 1/4 with surface polished, with minute punctures and scales; in profile slightly curved; male antenna inserted at basal 0.37 of rostrum at

distance in front of eye 1.83 width of frons; dorsal margin of scrobe evenly descending toward ventral surface of head. Head with frons 0.110mm wide; 1.01 as wide as dorsal tip of rostrum; subcephalic ridge low, extending to near middle of eye. Prothorax 0.366mm long, at base 1.15 as wide as long; pronotum basal margin moderately expanded laterally, sides slightly expanded toward middle, constricted at apex; punctures 0.018-0.028mm in diameter, shallow, bearing scales 0.036-0.055mm long by 0.006-0.009mm wide, interspaces slightly alutaceous; laterally and ventrally scales shorter and finer. Elytra at humeri 1.52 as wide as pronotum base; 3.43 as long as prothorax; 1.49 as long as wide; intervals at middle of elytra about 3X width of striae, bearing 2-3 rows of scales 0.036-0.074mm long by 0.009-0.014mm wide, surface finely alutaceous, slightly convex; striae moderately coarse, deep, with scales similar to those on adjacent intervals; interval 9 with 1 long sensory seta near apex. Legs lack special characters.

Paratypes. Length 1.560-1.940mm; width 0.790-0.990mm. Rostrum of male 0.460-0.550mm long; 1.39 to 1.50 as long as prothorax; male antenna inserted at basal 0.34-0.37 of rostrum at distance in front of eye 1.56-1.83 width of frons. Rostrum of female 0.640-0.720mm long; 1.78 to 1.81 as long as prothorax; similar to male; female antenna inserted at basal 0.30-0.31 of rostrum at distance in front of eye 1.69-1.93 width of frons; dorsal margin of scrobe as in male. Head with frons 0.100-0.130mm wide; 0.88-1.05 as wide as dorsal tip of rostrum. Prothorax 0.310-0.400mm long; at base 1.15-1.33 as wide as long. Elytra at humeri 1.36 to 1.52 as wide as prothorax at base; 2.56 to 3.54 as long as prothorax; 1.16 to 1.49 as long as wide. Median lobe of aedeagus in profile with tip thin, not produced dorsally or ventrally; in dorsal view largely parallel-sided, apex broadly rounded; endophallus with numerous small irregular granules about 0.006-0.009mm in size. Tegmen parameroid lobes combined into short membranous structure, structure prolonged in front of fenestrae (fenestrae not distinct in this preparation), with several minute macrochaetae about 0.005mm long; free ring of basal piece fused with tegmental plate; basal plate flat medially.

Material examined. Holotype. Panama: Chiriqui Prov, 2 km W Cerro Punta 1720 m, 1-7 VI 1977, H & A Howden (HAHC). Paratypes, (137 total). 4, same data as holotype (HAHC, DGKC); 1, same data but date 19-23 V 1977 (HAHC); 1, Panama: Chiriqui Prov, Cerro Punta, 2000-2200m, 23-V-1977, H & A Howden (HAHC); 2, Panama:



Figures 26-35. *Coelocephalapion goldilox* Kissinger. 26) tegmen of male genitalia, lateral view. *Trichapion baranowskii* Kissinger. 27) head of male, lateral view. 28) head of female, lateral view. 29) tarsus 1 tarsomere 1 of male, lateral view. 30) apical region of tibia 3 of male, lateral view. 31) apical region of median lobe of aedeagus, lateral view. 32) apical region of median lobe of aedeagus, lateral view. 33) apical region of median lobe of aedeagus, dorsal view. 34) right side of basal region apical region of median lobe of aedeagus near attachment of basal apodeme, dorsal view, orifice to top of page. *Trichapion santaritae* Kissinger. 35) left leg 2 of male detached from body, lateral view. Scale = 0.018mm for Fig. 26; 0.027mm for Fig. 29, 30, 31, 32, 33, 34; 0.110mm for Fig. 35; 0.184mm for Fig. 27, 28.

total). 4, same data as holotype (HAHC, DGKC); 1, same data but date 19-23 V 1977 (HAHC); 1, Panama: Chiriqui Prov, Cerro Punta, 2000-2200m, 23-V-1977, H & A Howden (HAHC); 2, Panama: Chiriqui Prov, Cerro Punta, 6200', 8-VII-1974, CW & L O'Brien & Marshall (CWOB, DGKC); 3, Panama: Chiriqui Prov, Cerro Punta, 6000', X-1953, NLH Kraus (AMNH, DGKC); 2, Panama: Chiriqui Prov, Cerro Punta, 10-V-1962, H Rucker (AMNH, DGKC); 55, Panama: Chiriqui Prov, 8 mi NE El Volcan 5900', 8-VII-1974, CW & L O'Brien & Marshall (CWOB, DGKC); 1, Panama: Chiriqui Prov, 7 mi W El Volcan, 4800', 8-VII-1974, CW & L O'Brien & Marshall (CWOB); 2, Panama: Chiriqui Prov, 6 mi W El Volcan, 5200', 8-VII-1974, CW & LO'Brien & Marshall (CWOB, DGKC); 2, Panama: Chiriqui Prov, Boqueta, 4000', 25-VI-1974, CW & LO'Brien & Marshall (CWOB, DGKC); 2, Panama: Chiriqui Prov, Boqueta, X-1953, NLH Kraus (AMNH, DGKC); 4, Panama: Chiriqui Prov, Bambito, 1000m, 24-XII-1974, H Wolda (CWOB, DGKC); 1, Panama: Chiriqui Prov, Qda Laguna near Rio San Felix, 725m, 19-I-1981, litter on sand, pocket S bank, W Suter, FMND 81:108 (CWOB); 3, PANAMA: Chiriqui Prov, Cerro Colorado, near Generator 1225-1240, W Suter, 27-I-1981, (CWOB, DGKC); 4, Panama: Chiriqui Prov, Pro Cerro Mogla, Qda Tufino, 1125m, 22-I-1981, sweep at entry, W Suter, FMHD #81-100 (CWOB, DGKC); 1, Costa Rica: Prov Puntarenas, Pension Monteverde, 1350m, 11-VIII-1976, HAHespenheide (CHAH); 3, Costa Rica: Prov Puntarenas, Pension Monteverde, 1500m, 17-23-Aug-1987, H&A Howden (HAHC, DGKC); 18, Costa Rica: Prov Puntarenas, Pension Monteverde, 1500m, 26-Feb-1991, K Maclachlan Hamiton (CMNC, DGKC); 2, Costa Rica: San Jose: 8.3 mi N San Isidro del General, 30-June-1972, RR & ME Murray (TAMU); 5, Costa Rica: SJ 13 mi N San Isidro del General, 6500', 23-VI-1974, CW & L O'Brien & Marshall (CWOB, DGKC); 2, Costa Rica: SJ 14 mi N San Isidro del General, 7300', 10-VII-1974, CW & L O'Brien & Marshall (CWOB, DGKC); 4, Costa Rica: SJ 16 mi N San Isidro del General, 7800', 10-VII-1974, CW & L O'Brien & Marshall (CWOB, DGKC); 1, Costa Rica: SJ 29 mi N San Isidro del General, 1100', 23-VI-1974, CW & L O'Brien & Marshall (CWOB); 4, Costa Rica: Car 6 mi W Paraiso, 4800', 22-VI-1974, CW & L O'Brien & Marshall (CWOB, DGKC); 3, Costa Rica: Car 8 mi N Empalme, 6400', 22-VI-1974, CW & L O'Brien & Marshall (CWOB, DGKC); 5, Costa Rica: 18 km N Cofradia, 5-VIII-1977, CW & L O'Brien & Marshall (CWOB, DGKC); 2, Honduras: 14 mi NE Nueva

Ocotepeque, 6900', 25-VII-1974, CW & LO'Brien & Marshall (CWOB, DGKC).

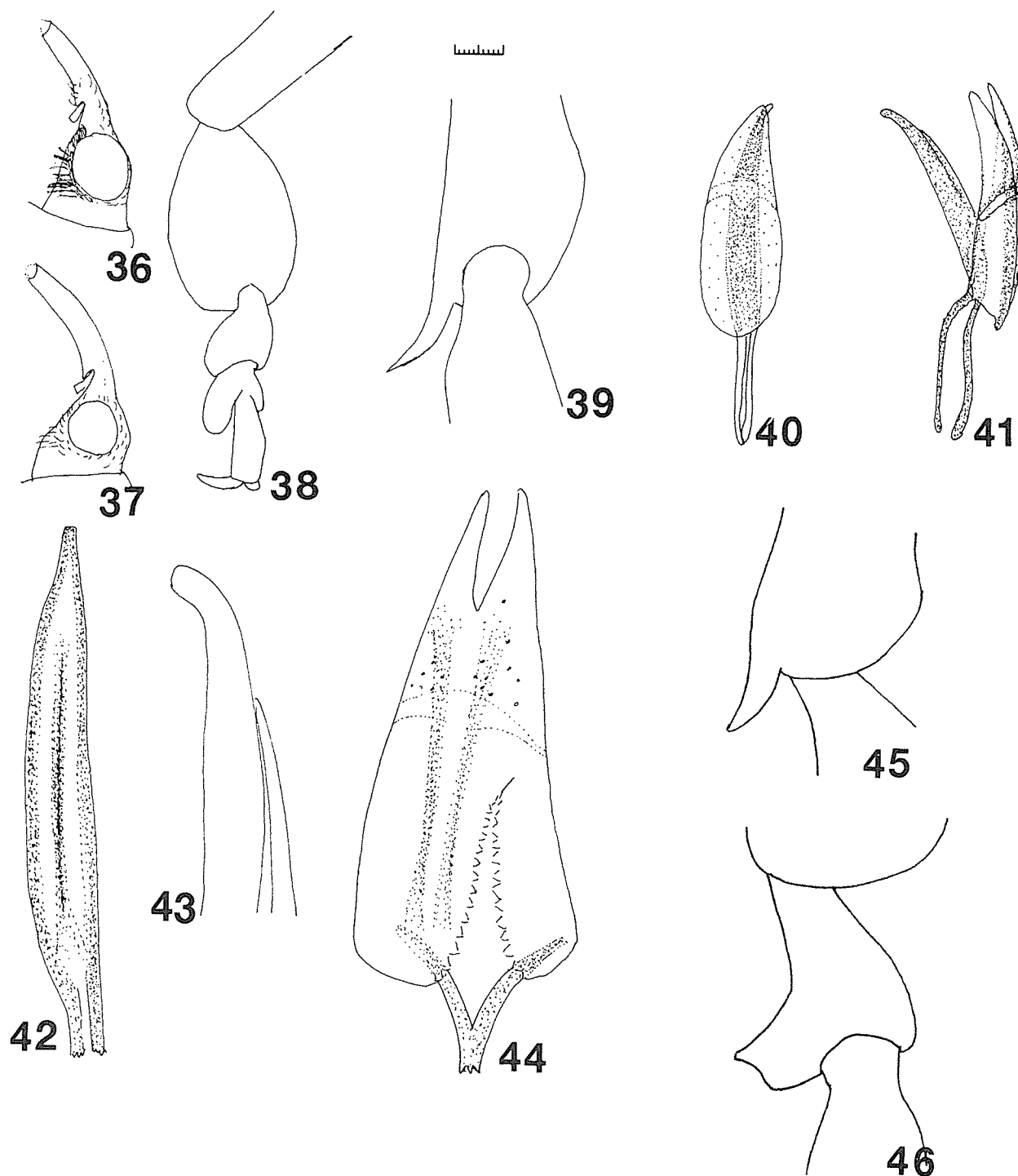
Etymology. The name alludes to the golden color of the vestiture; it is a coined name neuter in gender.

The species belongs to the *decoloratum* species group of *Coelocephalapion* but is not close to any described species. In Kissinger (1968), "Key to males of species of *Coelocephalapion* occurring in North and Central America", the species traces to couplet 73, which can be changed as follows:

73. Head behind eye and dorsal apical region of femur with distinctly coarser scales than stoutest seta on antenna 74
 Head behind eye and femur with scales not coarser than stoutest seta on antenna 73A
- 73A. Legs banded with a darker color (piceous) and coxae 1 and 2 same color as prothorax; pronotum punctures deep, minute scales barely project beyond rim of puncture; endophallus with 4 rows of teethlike structures; MA, ND, FL, TX, Mexico (Veracruz, Chiapas)
 *Coelocephalapion emaciipes* (Fall)
- Legs and coxae 1 and 2 testaceous; pronotal punctures shallow, golden scales project well beyond rim of puncture; endophallus lacks distinct sclerotized structures; Costa Rica, Panama
 *Coelocephalapion goldilox* Kissinger

***Coelocephalapion dilox* Kissinger
 new species
 (Figure 9)**

Holotype. Male 1.528mm long; 0.713mm wide. Piceous with slight bronze luster; antenna, coxae 1 and 2 and legs (including trochanter) testaceous; rostrum testaceous beyond insertion of antenna. On dorsum vestiture golden, fine, moderately sparse, uniform on pronotum and elytra; finer, whiter on head, side of thorax and elytra. Rostrum 0.366mm long; 1.25 as long as prothorax; largely polished except slightly alutaceous behind insertion of antenna, in basal 2/3 with sparse, fine, white scales 0.027-0.036mm long, apical region glabrous; nearly cylindrical, slightly expanded at insertion of antenna; in profile slightly curved; antenna inserted at basal 0.40 of rostrum at distance in front of eye 1.82 width of frons; dorsal margin of scrobe nearly evenly descending toward subcephalic ridge. Head with frons 0.080mm wide; 0.73 as wide as dorsal tip of rostrum; eye about 30% longer than high, dorsal margin of head slightly, broadly declivitous above posterior margin of eye;



Figures 36 - 44. *Trichapion santaritae* Kissinger. 36) head of male, lateral view. 37) head of female, lateral view. 38) tarsus 1 tarsomere 1 of male, dorsal view. 39) apex of tibia 2 of male, lateral view. 40) median lobe of aedeagus and tegmen, lateral view. 41) median lobe of aedeagus, dorsal view. 42) median lobe of aedeagus, dorsal view. 43) apical region of median lobe of aedeagus, lateral view. 44) paramere of tegmen, dorsal view, tear in basal region of paramere. *Apionion opetion* Kissinger. 45) apex of tibia 2 of male, lateral view. 46) tarsus 3 tarsomere 1 of male, lateral view. Scale = 0.027mm for Fig. 39,43; 0.054mm for Fig. 38, 42, 44, 45, 46; 0.110mm for Fig. 40, 41; 0.184mm for Fig. 36, 37.