KEY TO THE SPECIES OF GENUS AEDIMORPHUS FOURTH-INSTAR LARVAE

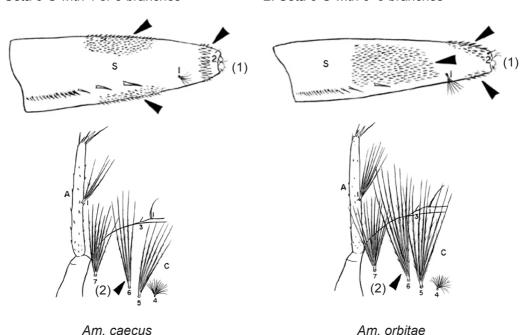
From PLATE 18: Distal 1–4 pecten spines more widely spaced; anal papillae longer than 0.5 length of saddle; seta 4-C inserted closer to 5-C than 6-C (except *Aedimorphus vexans*)

Siphon with patches of spicules

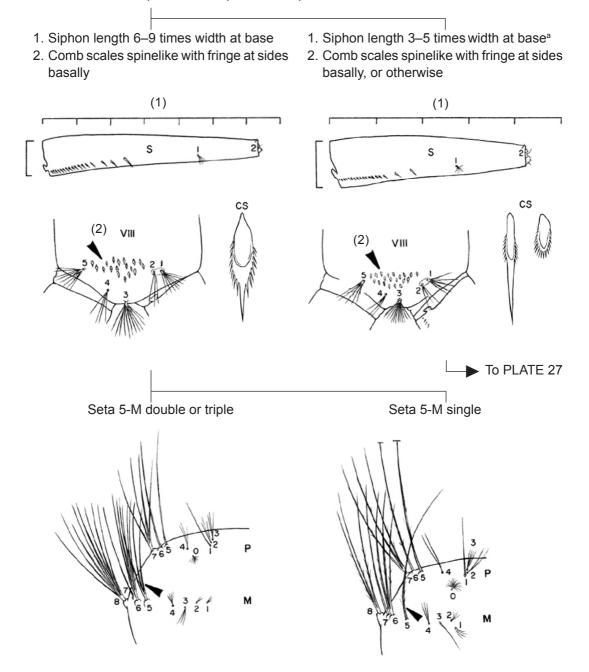
Siphon without patches of spicules

VIII 5 5 7 To PLATE 26

- Siphon with anterior and posterior patches of spicules near mid-length and band of spicules near apex
- 2. Seta 6-C with 4 or 5 branches
- Siphon with lateral patches of spicules near mid-length and small anterior and posterior patches near apex
- 2. Seta 6-C with 6-9 branches



From PLATE 25: Siphon without patches of spicules



^aIf the siphon is longer than 5 times width at base then the comb scales are evenly fringed at the sides and apex.

Am. pampangensis

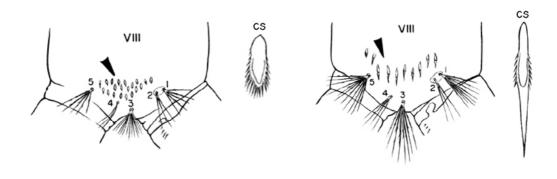
Am. mediolineatus

and Am. pallidostriatus

From PLATE 26: Siphon length 3–5 times width at base; comb scales spinelike with fringe at sides basally, or otherwise

Comb scales evenly fringed at sides and apex

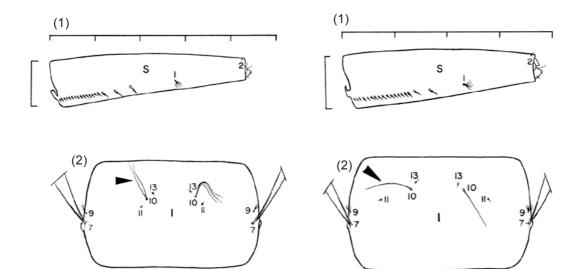
Comb scales spinelike with fringe at sides basally



To PLATE 28

- 1. Siphon length 4 to 5 times width at base
- 2. Seta 10-I double or triple

- 1. Siphon length less than 4 times width at base
- 2. Seta 10-I single

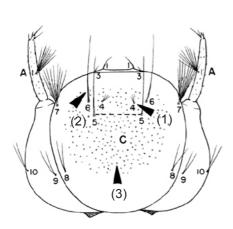


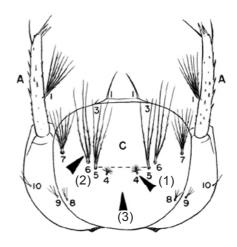
Am. pipersalatus

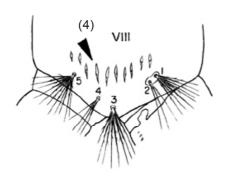
Am. alboscutellatus

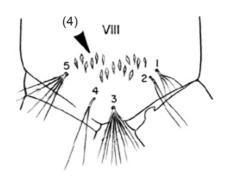
From PLATE 27: Comb scales spinelike with fringe at sides basally

- 1. Seta 4-C inserted anterior to 5-C
- 2. Seta 6-C single or double
- 3. Dorsal apotome of head with median spiculose area
- 4. Comb scales in an irregular row
- 1. Seta 4-C inserted on level or posterior to 5-C
- 2. Seta 6-C with 3-6 branches
- 3. Dorsal apotome of head without spiculose area
- 4. Comb scales in 2 or 3 irregular rows









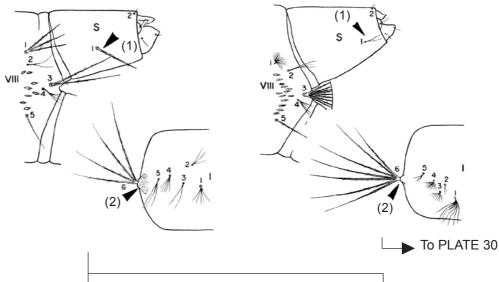
Am. vexans

Am. culicinus

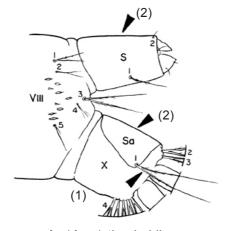
KEY TO THE SPECIES OF GENUS ARMIGERES SUBGENUS ARMIGERES FOURTH-INSTAR LARVAE²

From PLATE 1: Comb scales rather elongate, rounded or pointed, evenly fringed at sides and apex

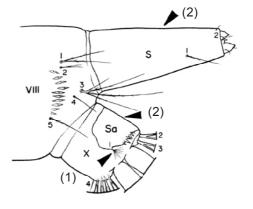
- 1. Seta 1-S strong, arising at or before proximal 0.75 of siphon
- 2. Seta 6-I–VI borne on large sclerotized tubercle
- 1. Seta 1-S weak, arising beyond proximal 0.75 of siphon
- 2. Seta 6-I–VI not borne on large sclerotized tubercle



- 1. Seta 1-X strong, single or double
- 2. Siphon short, about length of saddle
- 1. Seta 1-X small with multiple branches
- 2. Siphon longer than 2 times length of saddle



Ar. (Arm.) theobaldi

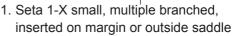


Ar. (Arm.) species 1

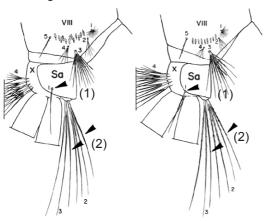
^aLarvae of Ar. bhayungi, Ar. foliatus, and Ar. maximus are unknown.

From PLATE 29: Seta 1-S weak, arising beyond proximal 0.75 of siphon; seta 6-I–VI not borne on large sclerotized tubercles

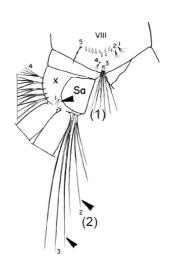
- 1. Seta 1-X single or double, as long as saddle, inserted within margin of saddle
- 2. Setae 2,3-X with simple branches, if with aciculate branches then seta 1-X inserted at margin of saddle



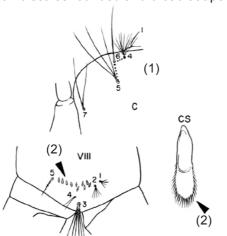
2. Setae 2,3-X otherwise



Ar. (Arm.) kuchingensis^a and species nr. kuchingensis

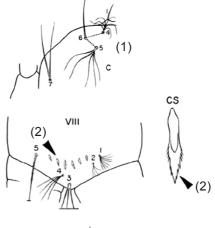


- 1. Setae 5- and 6-C separated by twice distance between setae 4- and 6-C
- 2. Comb scales rounded and broad at apex



Ar. (Arm.) kesseli

2. Comb scales pointed, or mixed pointed and rounded, narrow at apex



L To PLATE 31

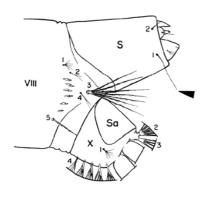
^{1.} Setae 4-, 5- and 6-C inserted equal distance from one another

^aArmigeres kuchingensis of Thurman (1959).

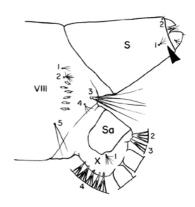
From PLATE 30: Setae 4-, 5- and 6-C inserted equal distance from one another; comb scales pointed, or mixed pointed and rounded, narrow at apex

Seta 1-S long, extending beyond apex of siphon

Seta 1-S short, not extending beyond apex of siphon

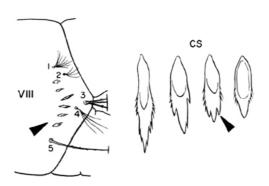


Ar. (Arm.) moultoni

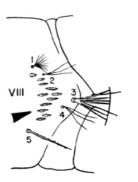


Comb usually with fewer than 7 scales, Comb v scales with denticles on one or both sides fringed

Comb with 7 or more scales, scales evenly fringed at sides and apex





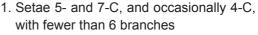




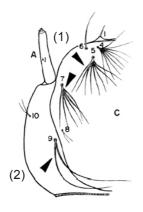
cs

From PLATE 31: Comb usually with fewer than 7 scales, scales with denticles on one or both sides

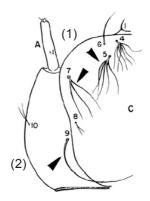
- 1. Setae 5- and 7-C, and occasionally 4-C, with 6 or more branches
- 2. Seta 9-C double or triple



2. Seta 9-C single



Ar. (Arm.) malayi

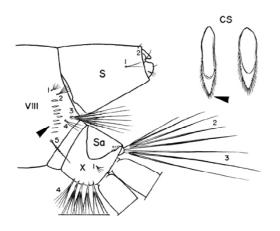


Ar. (Arm.) aureolineatus

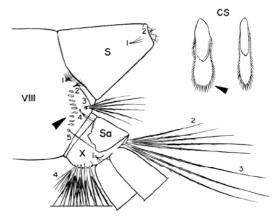
From PLATE 31: Comb with 7 or more scales, scales evenly fringed at sides and apex

Comb scales narrow with pointed apex, parallel-sided or wider at base

Comb scales broader, rounded or somewhat wider distally



Ar. (Arm.) subalbatus



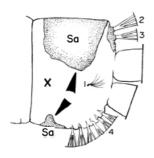
Ar. (Arm.) confusus and Ar. (Arm.) jugraensis

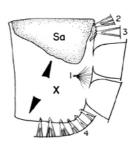
KEY TO THE SPECIES OF GENUS ARMIGERES SUBGENUS LEICESTERIA FOURTH-INSTAR LARVAE²

From PLATE 1: Comb scales relative short, with strong denticles, frequently with stout median spine

Abdominal segment X with sclerotized plates on dorsal (saddle) and ventral surfaces

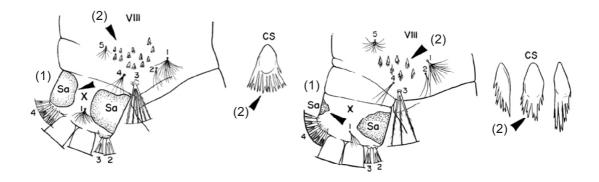
Abdominal segment X with sclerotized plate (saddle) on dorsal surface only





→ To PLATE 34

- Ventral sclerotized plate of segment X relatively large, covering ventral 0.33 of segment
- 2. Comb with 10 or more fanlike scales
- Ventral sclerotized plate of segment X relatively small, covering less than ventral 0.33 of segment
- 2. Comb with fewer than 10 scales with long denticles at apex (fingerlike)



Ar. (Lei.) flavus

^aThe larva of Ar. cingulatus is unknown.

Ar. (Lei.) magnus

From PLATE 33: Abdominal segment X with sclerotized plate (saddle) on dorsal surface only

Seta 5-VIII weak, with multiple branches

Seta 5-VIII strong, single or bifid

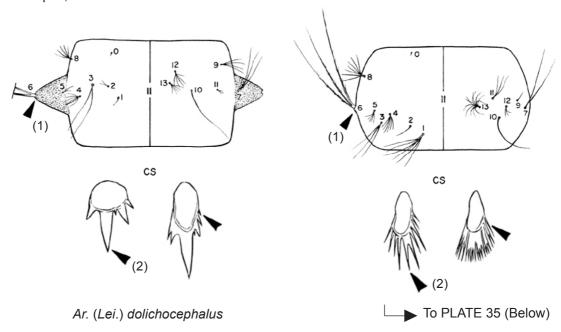
VIII

To PLATE 35 (Above)

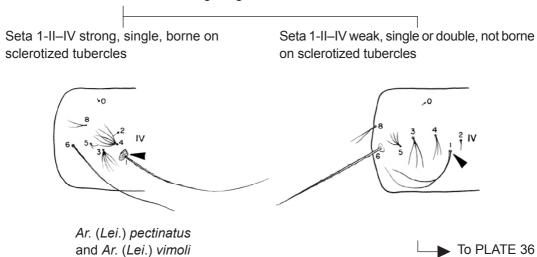
- Seta 6-I–VII borne on large sclerotized tubercles
- 2. Comb scales largely spinelike with pointed apex, barbed at sides near base
- Seta 6-I–VII not borne on large sclerotized tubercles

PLATE 34

2. Comb scales otherwise

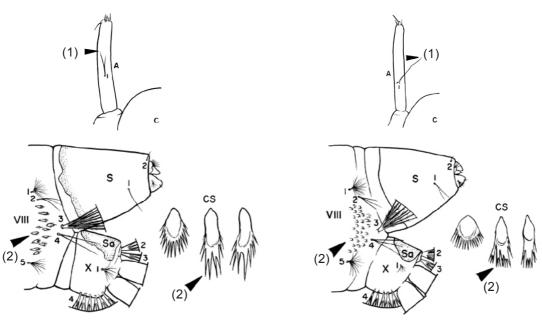


From PLATE 34: Seta 5-VIII strong, single or bifid



From PLATE 34: Setae 6-I-VII not borne on large sclerotized tubercles; comb scales otherwise

- Seta 1-A single or double, shorter than 0.33 length of antenna
- 2. Comb scales mainly with strong pointed apical spines, each scale with denticles at sides
- 1. Seta 1-A single, slightly longer than 0.33 length of antenna
- 2. Comb scales fanlike



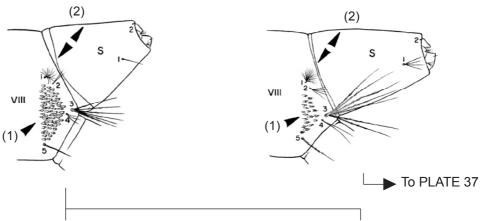
Ar. (Lei.) omissus

Ar. (Lei.) annulitarsis

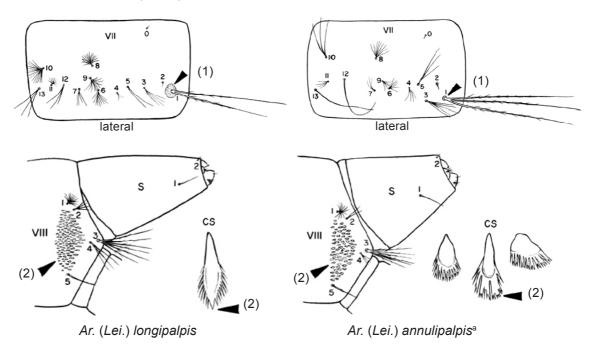
From PLATE 35: Seta 1-II-IV weak, single or double, not borne on sclerotized tubercles

- 1. Comb with 60 or more scales, if fewer then
- 2. Siphon as broad as long

- 1. Comb with fewer than 50 scales
- 2. Siphon usually longer than broad



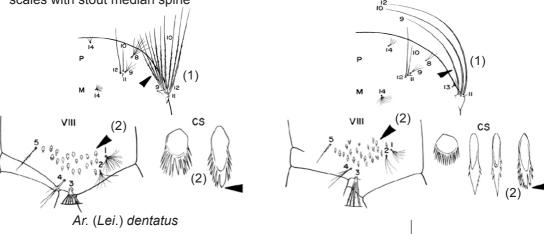
- 1. Seta 1-VII double, borne on sclerotized plate
- 2. Comb usually with more than 70 scales, each with median apical spine
- 1. Seta 1-VII with 3–5 branches, not borne on sclerotized plate
- 2. Comb with fewer than 70 scales, each fanlike



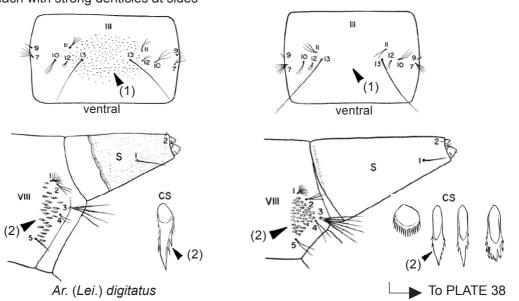
^aOccasionally *Ar. annulipalpis* has fewer than 50 comb scales and could be confused with *Ar. inchoatus*. It can be separated by the siphon length (Plate 38).

From PLATE 36: Comb with fewer than 50 scales; siphon usually longer than broad

- Mesothoracic pleural setae 9, 10, 12-M with a total of 8 or more branches, seta 9-M with 5 or more branches, setae 10, 12-M with 2 or more branches
- 2. Anterior comb scales fanlike, posterior scales with stout median spine
- Mesothoracic pleural setae 9, 10, 12-M with a total of fewer than 6 branches, seta 9-M with fewer than 5 branches, setae 10, 12-M with 3 or fewer branches
- 2. Comb scales variable



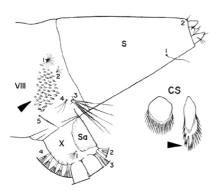
- Abdominal segments II–IV, and occasionally I, with large ventromedian patch of very fine spicules
- 2. Comb scales spinelike with pointed apex, each with strong denticles at sides
- 1. Abdominal segments I–IV without ventral patch of fine spicules
- 2. Comb scales variable



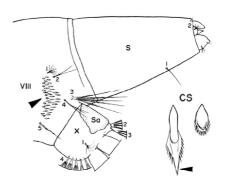
From PLATE 37: Abdominal segments I–IV without ventral patch of fine spicules; comb scales variable

Comb scales uniformly fringed, some denticles split apically, rarely with stout median apical spine

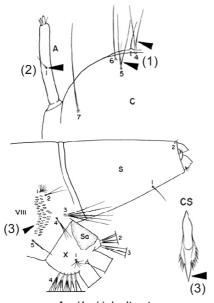
Anterior comb scales fanlike, posterior scales with median apical spine



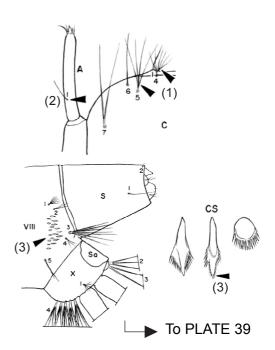
Ar. (Lei.) inchoatus



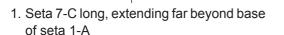
- 1. Setae 4- and 5-C usually single (occasionally with 1–4 branches)
- 2. Seta 1-A inserted near middle of antennal shaft
- 3. Comb scales mainly with stout median apical spine and fringe at sides
- 1. Setae 4- and 5-C with multiple branches (4 or more branches)
- 2. Seta 1-A inserted nearer base of antenna
- 3. Comb scales variable



Ar. (Lei.) balteatus



From PLATE 38: Setae 4- and 5-C with multiple branches (4 or more branches); seta 1-A inserted nearer base of antennal shaft; comb scales variable



- 2. Seta 5-C as long as 6-C
- 3. Comb scales with more or less narrow pointed apex
- 1. Seta 7-C short, not reaching beyond base of seta 1-A
- 2. Seta 5-C much shorter than 6-C
- 3. Comb scales broader apically, fringed at sides

