

~~Larvae~~ of Melolonthinae

With Keys to Tribes, Genera, and
Species (Coleoptera: Scarabaeidae)

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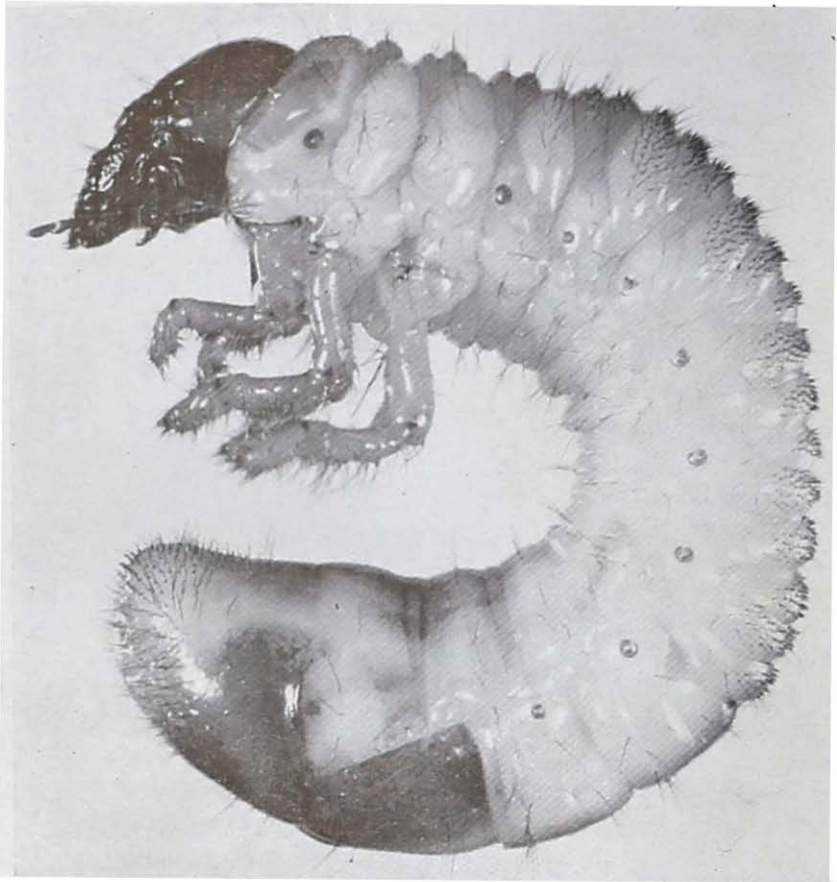


Fig. 1.— Third-stage larva of *Phyllophaga hirticula* (Knoch), left lateral view. Much enlarged.

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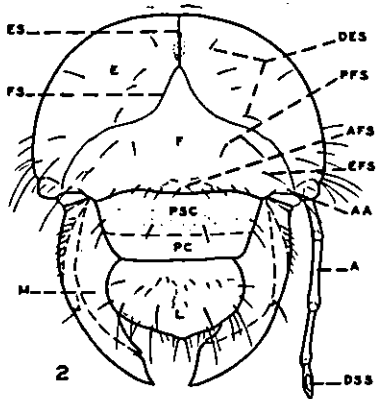
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PLATE I

- Fig. 2. *Phyllophaga horni* (Sm.). Head.
 Fig. 3. *Phyllophaga fusca* (Froel.). Left maxilla, ventral view.
 Fig. 4. *Phoebetus comatus sloopi* Barrett. Head.
 Fig. 5. *Polyphylla decemlineata* (Say). Left maxilla, dorsal view.
 Fig. 6. *Phyllophaga crenulata* (Froel.). Right maxilla, ventral view.
 Fig. 7. *Autoserica castanea* Arrow. Distal part of lacinia of left maxilla showing unci.
 Fig. 8. *Plectris aliena* Chapin. Head.
 Fig. 9. *Polyphylla decemlineata* (Say). Maxillary stridulatory teeth of right maxilla.
 Fig. 10. *Phyllophaga hirticula* (Knoch). Maxillary stridulatory teeth of right maxilla.
 Fig. 11. *Amphimallon majalis* (Razoum.). Head.
 Fig. 12. *Autoserica castanea* Arrow. Left maxilla, dorsal view.
 Fig. 13. *Serica ligulata* Dawson. Left maxilla, dorsal view.
 Fig. 14. *Phyllophaga horni* (Sm.). Left mandible, dorsal view.
 Fig. 15. *Phyllophaga horni* (Sm.) Left mandible, ventral view.

SYMBOLS USED ON PLATE I

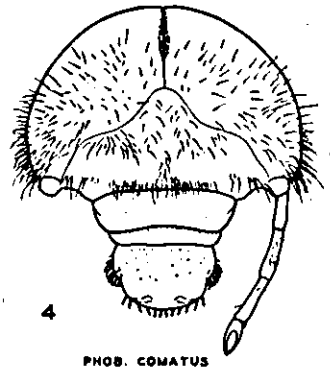
SD—Maxillary stridulatory area	GD—Uncus of galea
A—Antenna	L—Labrum
AA—Seta of anterior frontal angle	LA—Lacinia
AC—Acia	LU—Unci of lacinia
AFS—Anterior frontal setae	M—Mandible
BLR—Baso-lateral region	MP—Maxillary palpus
CAR—Cardo	MAS—Maxillary articulating skin
DER—Dorso-exterior region	MO—Molar region
DES—Dorso-epicranial setae	PC—Preclypeus
DMS—Dorso-molar setae	PSC—Postclypeus
DSS—Dorsal sensory spot	PA—Preartis
E—Epicranium	PTA—Postartis
EFS—Exterior frontal seta	SA—Scissorial area
FS—Epicranial suture	SCR—Scrobis
F—Frons	SD—Maxillary stridulatory area
FS—Frontal suture	ST—Stipes
G—Galea	VP—Ventral process



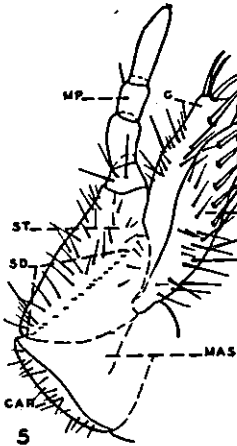
PH. HORNII



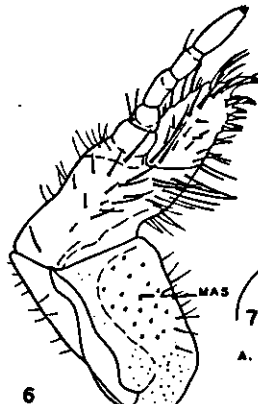
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PHOB. COMATUS



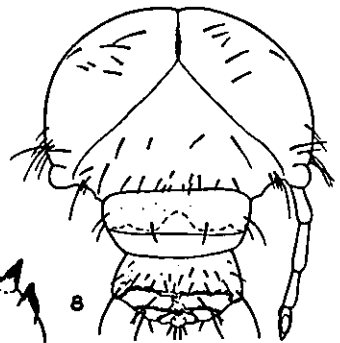
P. DECIMLINEATA



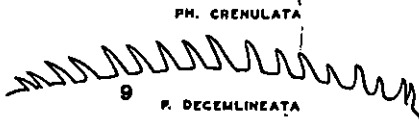
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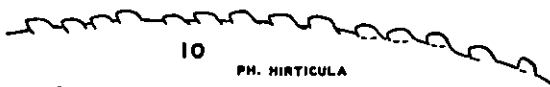
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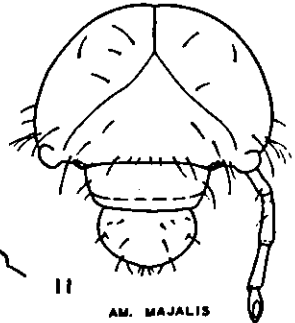
PL. ALIENA



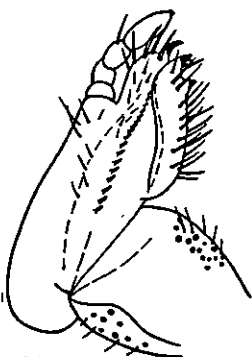
P. DECIMLINEATA



PH. HIRTICULA



AM. MAJALIS



A. CASTANEA



S. LIGULATA



PH. HORNII

PH. HORNII

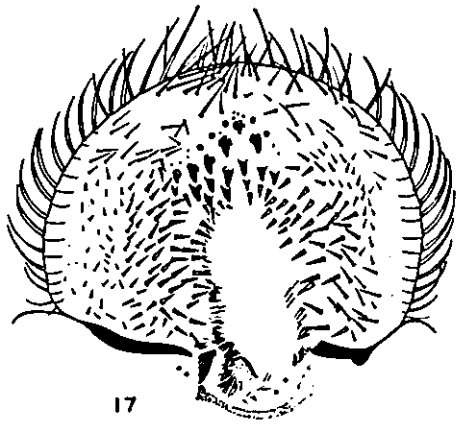
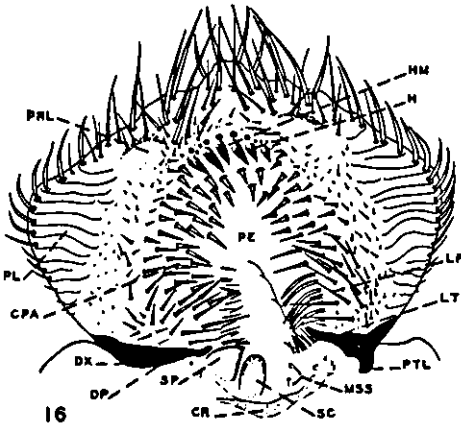
PLATE II

- Fig. 16. *Plectris aliena* Chapin. Epipharynx.
 Fig. 17. *Polyphylla decemlineata* (Say). Epipharynx.
 Fig. 18. *Phobetrus comatus sloopi* Barrett. Epipharynx.
 Fig. 19. *Macroductylus subspinosus* (F.). Epipharynx.
 Fig. 20. *Hopliid equina* Lec. Epipharynx.
 Fig. 21. *Coenonycha pascuensis* Potts. Epipharynx.
 Fig. 22. *Dichelonyx robusta* Fall. Epipharynx.
 Fig. 23. *Phyllophaga fusca* (Froel.). Proplegmatia.
 Fig. 24. *Phyllophaga crenulata* (Froel.). Proplegmatia.
 Fig. 25. *Amphimallon majalis* (Razoum.). Venter of tenth abdominal segment.
 Fig. 26. *Phyllophaga fusca* (Froel.). Proplegmatia.
 Fig. 27. *Phyllophaga micans* (Knoch). Proplegmatia.
 Fig. 28. *Diplotaxis* sp. Epipharynx.
 Fig. 29. *Phyllophaga seruida* (F.). Proplegmatia.
 Fig. 30. *Phyllophaga horni* (Sm.). Proplegmatia.

SYMBOLS USED ON PLATE II

CPA—Chaetoparia
 CR—Crepis
 DP—Dexiophoba
 DX—Dexiotorma
 EZ—Epizygum
 H—Helus
 HM—Haptomerum
 LP—Lacophoba
 LT—Lacotorma

MIS—Microsensilla
 MSS—Macrosensilla
 PE—Pedium
 PL—Plegmatium
 PRL—Proplegmatium
 PTL—Pternotorma
 SC—Sense cone
 SP—Sclerotized plate

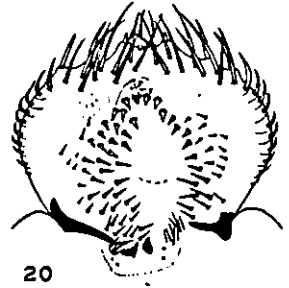
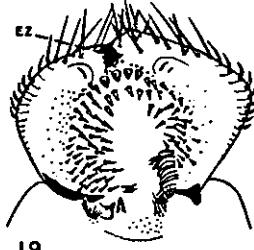
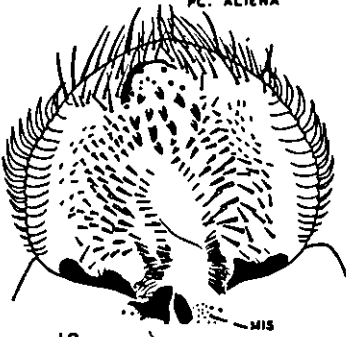


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PL. ALIENA

P. DECEMLINEATA



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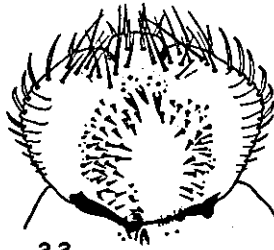
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PH. COMATUS

M. SUBSPINOSUS

K. EQUINA



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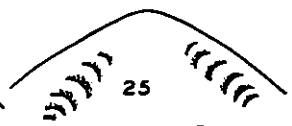
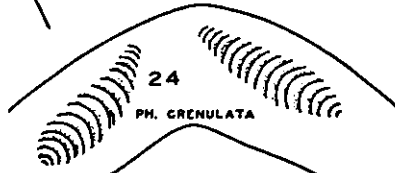
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C. PASCUENSIS

D. ROBUSTA

S. LIGULATA

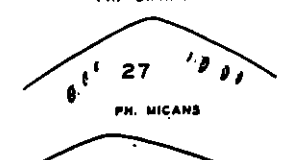
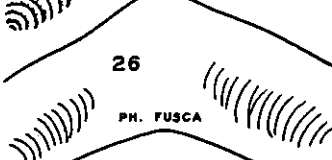
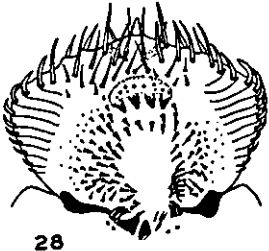


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PH. GRENULATA

PH. BIPARTITA



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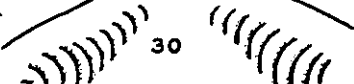
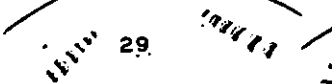
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DIPLOTARIS

PH. FUSCA

PH. MICANS



PH. FERVIDA

PH. HORNII

PLATE II

PLATE III

- Fig. 31. *Phyllophaga hirticula* (Knoch). Epipharynx.
 Fig. 32. *Amphimallon majalis* (Razoum). Epipharynx.
 Fig. 33. *Phyllophaga hirticula* (Knoch). Dorso-exterior region of mandible.
 Fig. 34. *Phyllophaga profunda* (Blanch.). Dorso-exterior region of mandible.
 Fig. 35. *Autoserica castanea* Arrow. Venter of tenth abdominal segment.
 Fig. 36. *Diplotaxis* sp. Venter of tenth abdominal segment.
 Fig. 37. *Phyllophaga rugosa* (Melsh.). Dorso-exterior region of mandible.
 Fig. 38. *Serica ligulata* Dawson. Venter of tenth abdominal segment.
 Fig. 39. *Phyllophaga horni* (Sm.). Dorso-exterior region of mandible.
 Fig. 40. *Polyphylla decemlineata* (Say). Central portion of raster.
 Fig. 41. *Coenonycha pascuensis* Potts. Venter of tenth abdominal segment.
 Fig. 42. *Dichelonyx robusta* Fall. Venter of tenth abdominal segment.

SYMBOLS USED ON PLATE III

ASYL—Anal slit	LPH—Laeophoba
CPA—Chaetoparia	LT—Laeotorma
CR—Crepis	MIS—Microsensilla
DP—Dexiophoba	MSS—Macrosensilla
DX—Dexiotorma	PE—Pedium
EZ—Epizygum	PL—Plegmatium
HL—Haptolachus	PLA—Palidium
HM—Haptomerum	PLM—Plegma
LAL—Lower anal lobe	PRL—Proplegmatium

PLATE IV

- Fig. 43. *Phyllophaga hirticula* (Knoch). Venter of tenth abdominal segment.
 Fig. 44. *Macroductylus subspinosus* (F.). Venter of tenth abdominal segment.
 Fig. 45. *Phyllophaga futilis* (Lec.). Central portion of raster.
 Fig. 46. *Phyllophaga ephilida* (Say). Central portion of raster.
 Fig. 47. *Phobetus comatus sloopi* Barrett. Venter of tenth abdominal segment.
 Fig. 48. *Phyllophaga fusca* (Froel.). Ventral and lateral views of compressed pali.
 Fig. 49. *Hoplia equina* Lec. Venter of tenth abdominal segment.
 Fig. 50. *Phyllophaga hirticula* (Knoch). Ventral and lateral views of depressed pali.
 Fig. 51. *Phyllophaga tristis* (F.). Venter of tenth abdominal segment.
 Fig. 52. *Amphimallon majalis* (Razoum). Venter of tenth abdominal segment.
 Fig. 53. *Plectris aliena* Chapin. Venter of tenth abdominal segment.

SYMBOLS USED ON PLATE IV

B—Barbula	PLA—Palidium
C—Campus	TE—Tegillum
DAL—Dorsal anal lobe	S—Septula
LAL—Lower anal lobe	

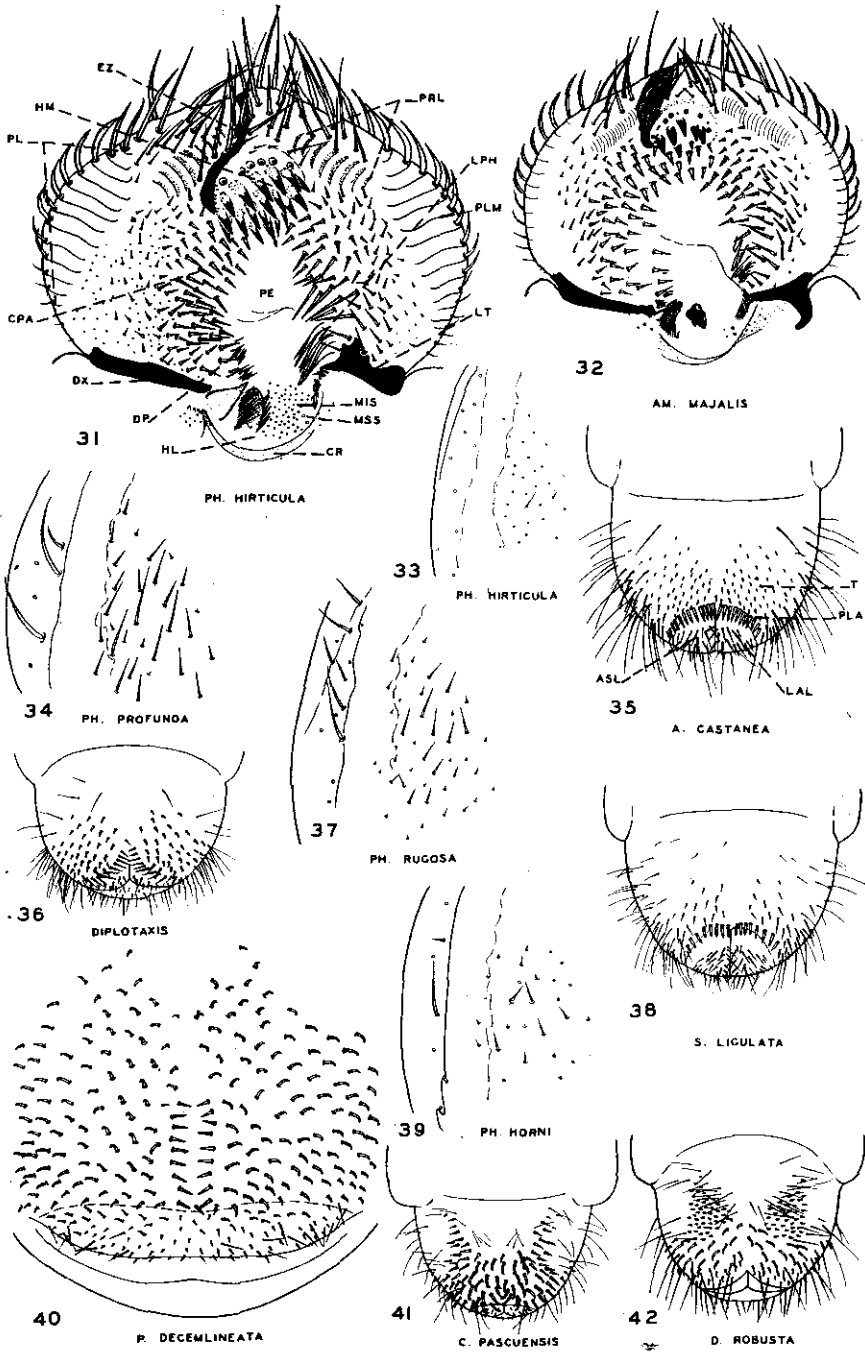
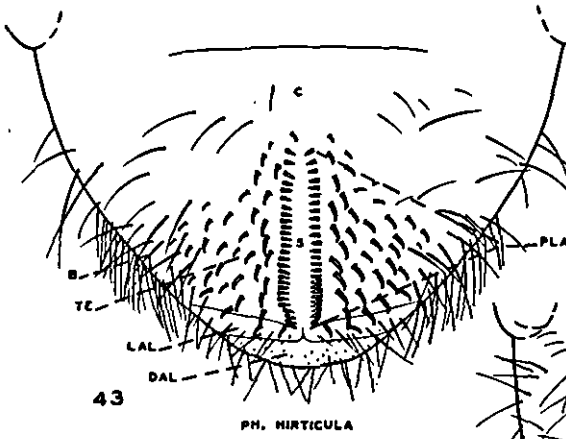
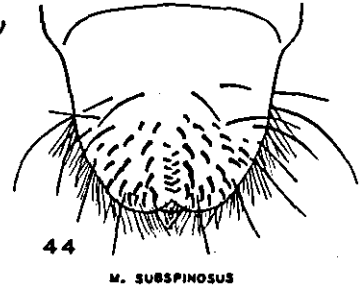


PLATE III



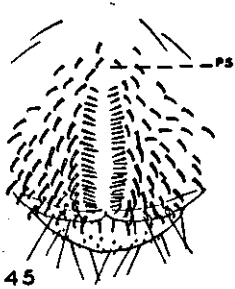
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PH. HIRTICULA



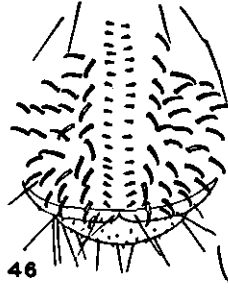
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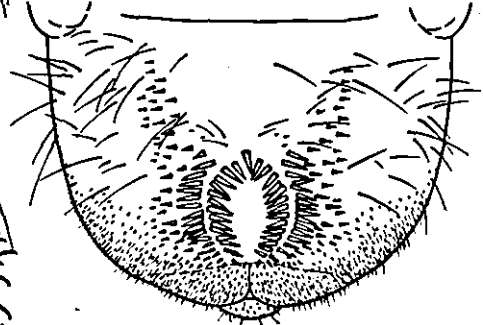
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PH. FUTILIS



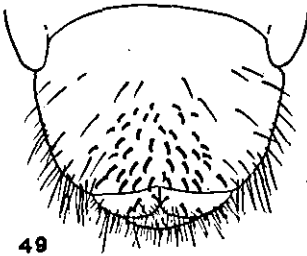
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PH. EPHELINA



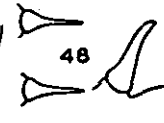
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PHOB. COMATUS



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H. EQUINA



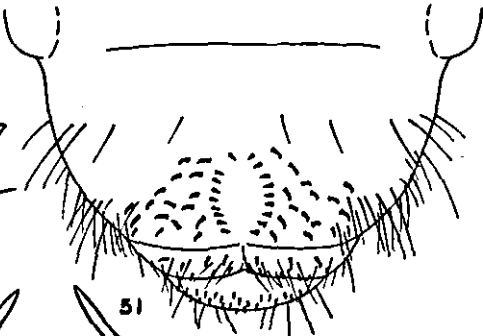
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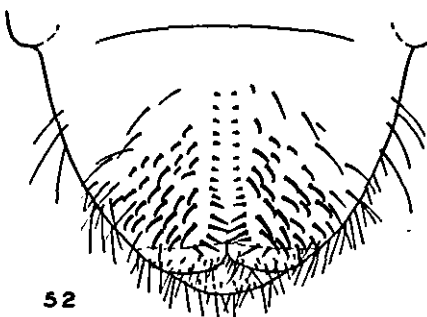
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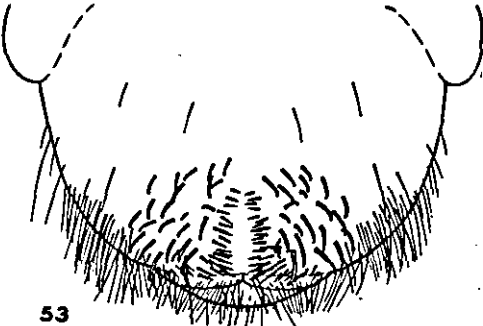
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PH. TRISTIS



52

AM. MAJALIS



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PL. ALIENA

PLATE IV