

Larvae of Melolonthinae

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

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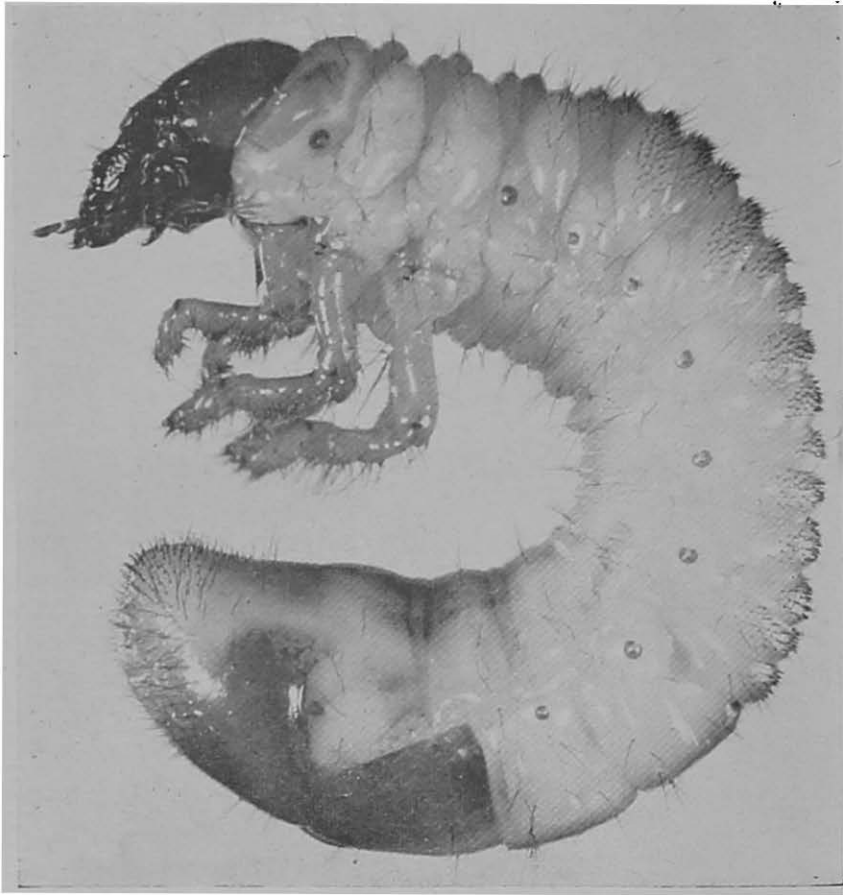


Fig. 1.—Third-stage larva of *Phyllophaga hirticula* (Knoch), left lateral view. Much enlarged.

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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
ES—Epicranial suture	SCR—Scrobis
F—Frons	SD—Maxillary stridulatory area
FS—Frontal suture	ST—Stipes
G—Galea	VP—Ventral process

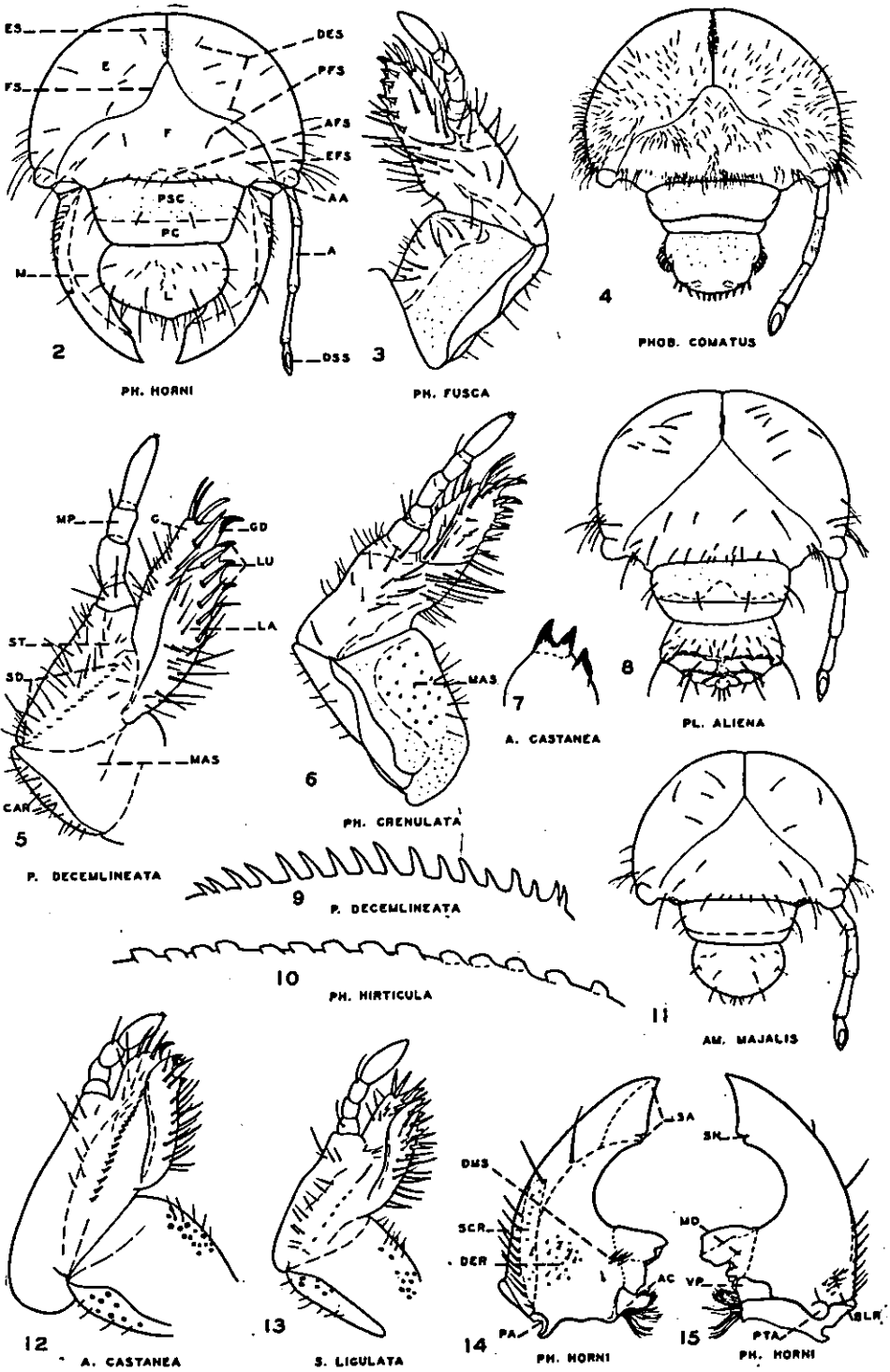


PLATE I

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. *Hoplia 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 fervida* (F.). Proplegmatia.
 Fig. 30. *Phyllophaga horni* (Sm.). Proplegmatia.

SYMBOLS USED ON PLATE II

CPA—Chaetoparia	MIS—Microsensilla
CR—Crepis	MSS—Macrosensilla
DP—Dexiophoba	PE—Pedium
DX—Dexiotorma	PL—Plegmatium
EZ—Epizygmum	PRL—Proplegmatium
H—Helus	PTL—Pternotorma
HM—Haptomerum	SC—Sense cone
LP—Laeophoba	SP—Sclerotized plate
LT—Laeotorma	

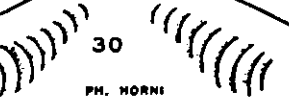
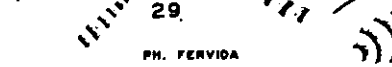
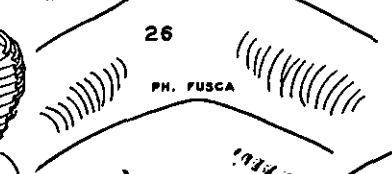
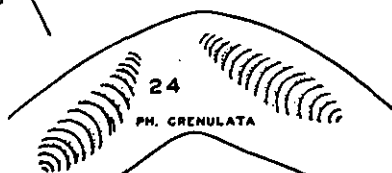
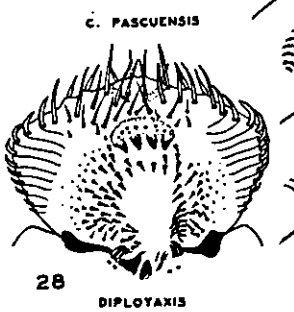
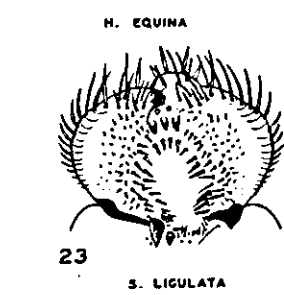
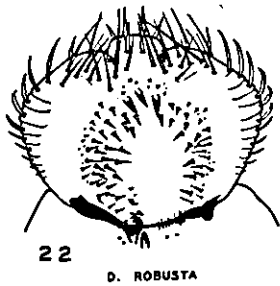
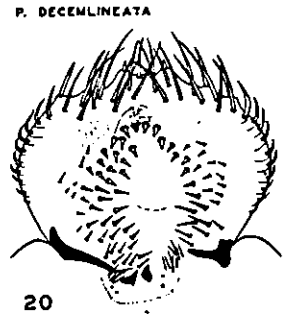
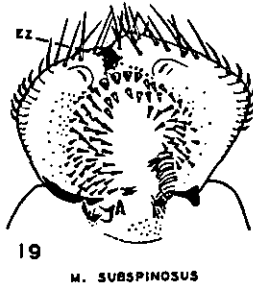
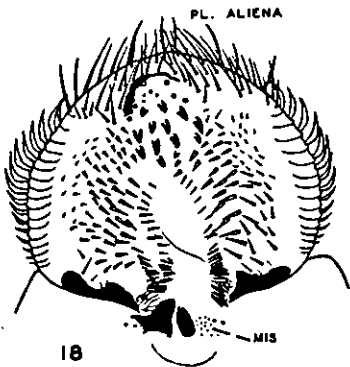
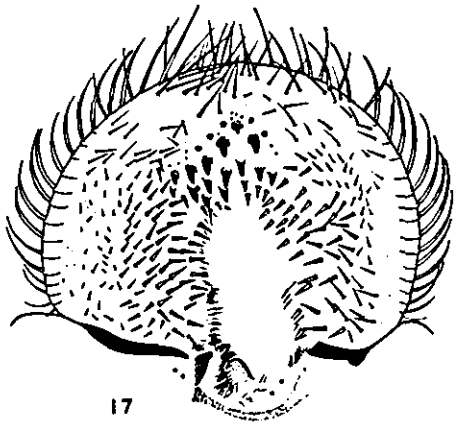
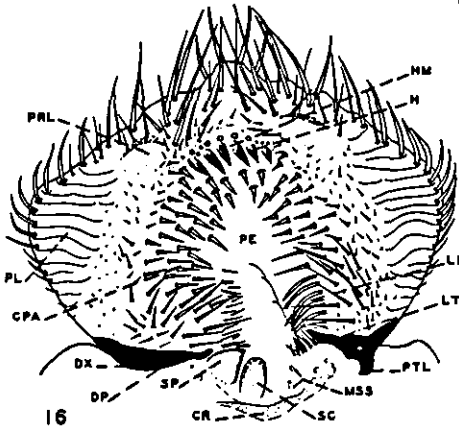


PLATE III

- 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

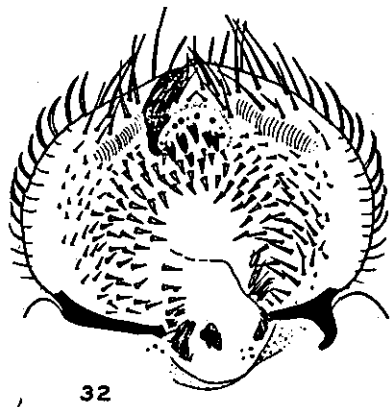
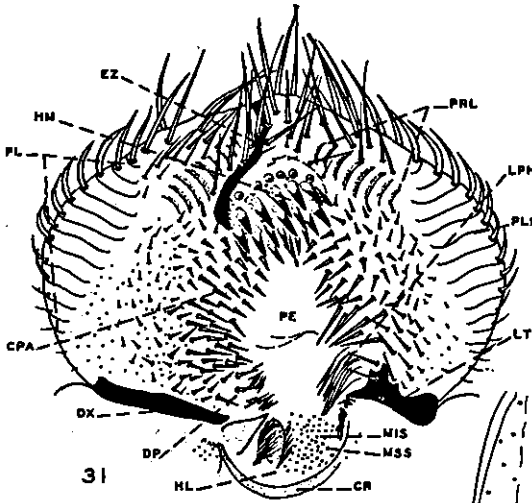
ASYL—Anal slit	LPH—Laeophoba
CPA—Chaetoparia	LT—Lacotorma
CR—Crepis	MIS—Microsensilla
DP—Dexiophoba	MSS—Macrosensilla
DX—Dexiotorma	PE—Pedium
EZ—Epizygum	PL—Plegmatium
HL—Haptolachus	PLA—Palidium
HM—Haptomerum	PLM—Plegma
LAL—Lower anal lobe	PRL—Proplegmatium

PLATE IV

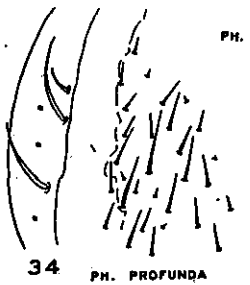
- Fig. 43. *Phyllophaga hirticula* (Knoch). Venter of tenth abdominal segment.
 Fig. 44. *Macroductylus subspinosus* (F.). Venter of tenth abdominal segment.
 Fig. 45. *Phyllophaga futilis* (Lec.). Central portion of raster.
 Fig. 46. *Phyllophaga ephilida* (Say). Central portion of raster.
 Fig. 47. *Phobetrus 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

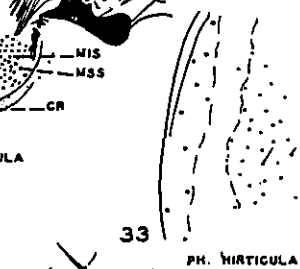
B—Barbula	PLA—Palidium
C—Campus	TE—Tegillum
DAL—Dorsal anal lobe	S—Septula
LAL—Lower anal lobe	



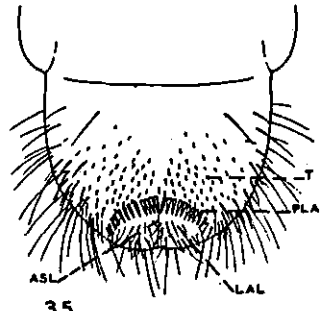
32 AM. MAJALIS



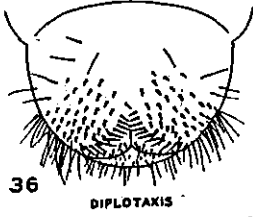
34 PH. PROFUNDA



33 PH. HIRTICULA



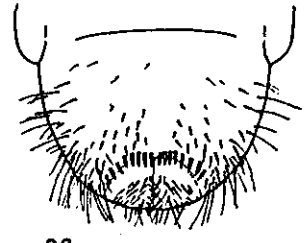
35 A. CASTANEA



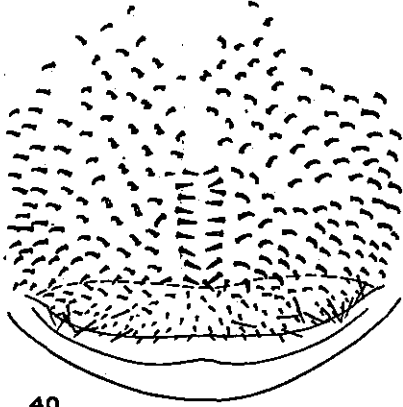
36 DIPILOTAKIS



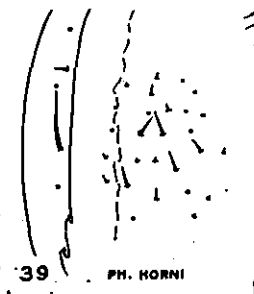
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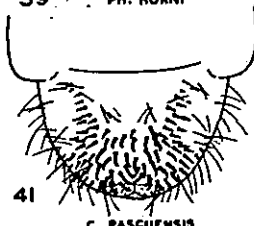
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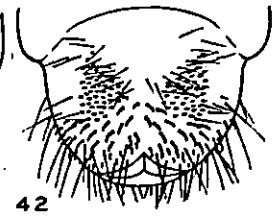
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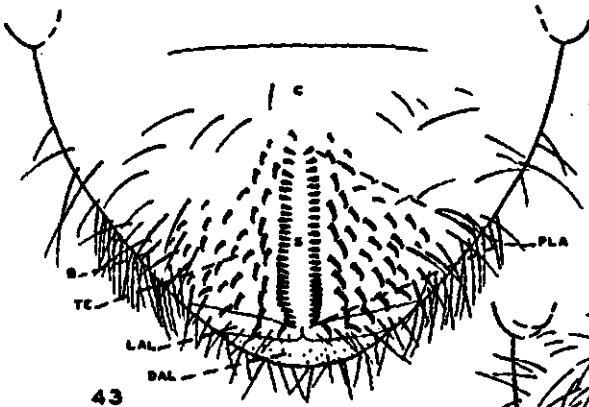
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41 C. PASCUENSIS

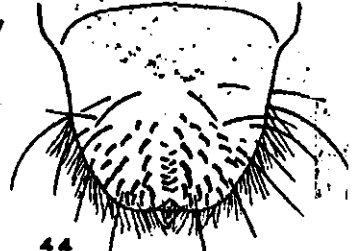


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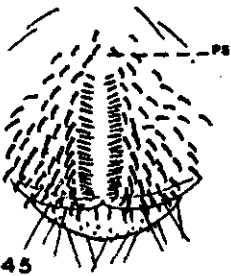
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PH. HIRTICULA



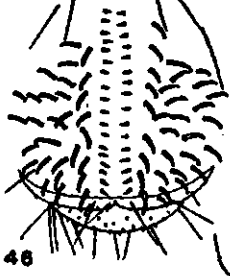
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M. SUBSPINOSUS



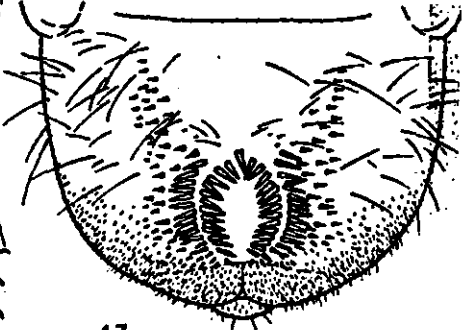
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PH. FUTILIS



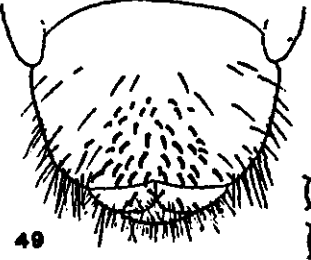
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PH. EPHILINA



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PHOS. COMATUS



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M. EQUINA



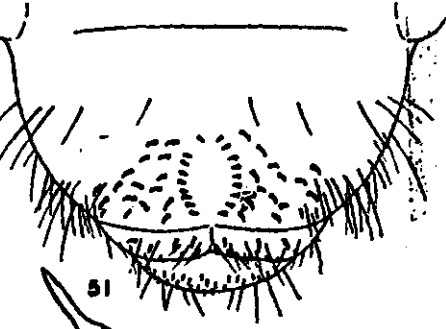
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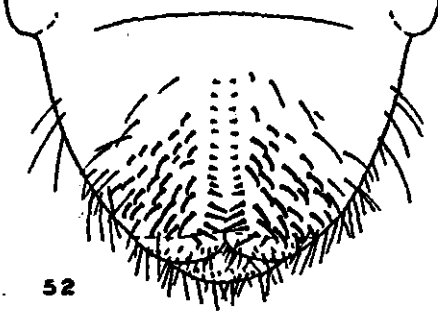
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PH. HIRTICULA



51

PH. TRISTIS



52

AM. MAJALIS



53

PL. ALIENA