

The Scolytidae and Platypodidae (Coleoptera) from Borneo Found in Logs at Nagoya Port I

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Abstract: A total of 144 scolytid species found in logs from Borneo at Nagoya Port are listed. Details of the host records for the present collection are given.

Key words: Scolytidae, Borneo, ecology, plant quarantine, host

Introduction

Although the ecology of the scolytid and platypodid beetles of the Malayan Peninsula has been well studied, little has been known of that of the other Southeast Asian and New Guinea areas.

On the basis of the inspection report on tropical logs imported from Borneo at Nagoya Port, scolytid and platypodid beetles, their host plants and localities of shipment will be described below.

Of these beetles, scolytid beetles are listed in the present paper, and platypodid beetles will be listed in the following paper.

About 110, 000 specimens of Scolytidae, consisting of 144 species of 25 genera, were collected by plant inspectors of Seibu Sub-Branch from April 1982 to March 1987.

Family Scolytidae

1. *Diamerus curvifrons* (WALKER)
Kimanis, Kudat, Bintulu, Sibuti¹⁾; 9 exs., *Artocarpus* sp.²⁾
2. *Diamerus luteus* HAGEDORN
Kimanis, Tg. Mani; 57 exs., *Artocarpus* sp.
3. *Sphaerotrypes bryanti* BROWNE
Kudat; 1♂1♀, *Vatica* sp.
4. *Sphaerotrypes carinatus* EGGERS
Bintulu; 2 exs., *Hopea* sp.
5. *Sphaerotrypes moseri* EGGERS
Banggi, Kudat; 11♂12♀, *Shorea* sp.
6. *Phloeosinus brunneus* BROWNE

1) Shipment locality

2) Host record

- Sipitang ; 1♀, *Podocarpus* sp.
7. *Phloeosinus cibratus* BLANDFORD
Niah, Tg. Mani ; 10♂10♀, Myristicaceae sp.
8. *Phloeosinus latus* EGGERS
Tawau, Niah, Suai, Tg. Baram, Tg. Mani ; 29♂41♀, Myristicaceae sp.
9. *Phloeosinus vialis* BLANDFORD
Niah ; 27♂50♀, Myristicaceae sp.
10. *Liparthrum palaquius* (SCHEDL)
Bintulu, Mukah, Tatau, Tg. Mani ; 55 exs., *Cratoxylum arborescens*.
11. *Bothinodroctonus bicinctus* SCHEDL
Niah, Suai, Tg. Mani ; 43♂58♀ : *Parishia* sp.
12. *Spongotarsus vexator* BROWNE
Kimanis ; 1 ex., *Shorea* sp.
13. *Bothrosternoides malayensis* SCHEDL
Balingian, Mukah, Niah, Suai, Tg. Mani, Tg. Salirong ; 16♂17♀, *Parishia* sp., 24♂25♀, *Canarium* sp., 13♂9♀, *Terminalia* sp.
14. *Cryphalus artocarpus* (SCHEDL)
Niah ; 10 exs., unidentified log
15. *Cryphalus cylindricus* BROWNE
Banggi, Lahad Datu, Tawau, Suai, Tatau ; 20♂16♀ : *Dipterocarpus* sp.
16. *Cryphalus laevis* BROWNE
Kudat ; 4 exs., *Dipterocarpus* sp.
17. *Cryphalus substriatus* SCHEDL
Niah, Tatau ; 17 exs., *Parishia* sp.
18. *Hypocryphalus perminimus* (SCHEDL)
Banggi, Kudat, Tagasan ; 328 exs., *Terminalia* sp.
19. *Hypothenemus birmanus* (EICHHOFF)
Bintulu, Niah ; 3♀, *Parishia* sp., 1♀, *Shorea* sp.
20. *Hypothenemus dipterocarpi* HOPKINS
Tagasan ; 3♂6♀, *Shorea* sp., 1♂32♀, *Gmelina arborea*
21. *Hypothenemus eruditus* WESTWOOD
Kudat, Miri, Niah ; 1♂14♀, *Mangifera* sp., 2♂25♀, *Shorea* sp., 13♂317♀, *Koompassia excelsa*, 35♀, *Irvingia malayana*
22. *Hypothenemus insignis* BROWNE
Niah ; 3 exs., *Parishia* sp.
23. *Cyrtogenius brevior* (EGGERS)
Kimanis, Sandakan, Tagasan, Bintulu ; 18♂12♀, *Mangifera* sp., 20♂25♀, *Canarium* sp., 2♀, *Dipterocarpus* sp.
24. *Cyrtogenius elongatus* (EGGERS)
Kudat ; 39♂55♀, *Dipterocarpus* sp.
25. *Cyrtogenius longipennis* BROWNE
Kudat ; 26♂30♀, *Vatica* sp.
26. *Cyrtogenius orientalis* (EGGERS)

- Niah ; 3♀, Myristicaceae sp.
27. *Cyrtogenius perakensis* (SCHEDL)
Kimanis, Sindomin, Tawau, Bintulu, Lawas, Sejingkat, Suai, Tatau, Ketapang, Tarakan ; 268 exs., *Agathis* sp.
28. *Cyrtogenius vaticae* NUNBERG
Kudat, Tg. Mani ; 21 exs., *Anisoptera* sp., 26♂16♀, *Vatica* sp.
29. *Dryocoetiops Kepongi* (SCHEDL)
Bintulu ; 41♂31♀, ? Burseraceae sp.
30. *Dryocoetiops laevis* (STROHMEYER)
Various shipment localities ; 36♂1,051♀, *Dipterocarpus* sp.
31. *Ozodendron nitens* SCHEDL
Tg. Mani ; 3♂6♀, ? Dipterocarpaceae sp.
32. *Ozopemon browniei* SCHEDL
Kudat, Marudu Bay, Tawau, Wallace Bay, Bintulu, Kuala Semanock, Tatau, Tg. Baram, Tg. Mani ; 2♀, *Parishia* sp., 22♀, *Anisoptera* sp., 79♀, *Dipterocarpus* sp., 1♀, *Dryobalanops* sp., 1♀, *Shorea* sp.
33. *Ozopemon fuscicollis* HAGEDORN
Bintulu ; 1♀, *Canarium* sp.
34. *Ozopemon obanus* HAGEDORN
Suai ; 1♀, *Dyera* sp., 1♀, *Koompassia malaccensis*
35. *Ozopemon regius* HAGEDORN
Lawas, Suai, Tg. Baram, Tg. Mani ; 1♀, *Gluta* or *Melanorroea* sp., 1♀, *Alstonia* sp., 16♀, *Dyera* sp., 3♀, *Anisoptera* sp., 1♀, *Dipterocarpus* sp., 1♀, Sapotaceae sp.
36. *Ozopemon sirambeanus* HAGEDORN
Kudat, Bintulu, Tg. Mani, Bandjarmasin ; 1♀, *Anisoptera* sp., 1♂8♀, *Shorea* sp.
37. *Poecilips linearis* EGGER
Kuala Semanok ; 5 exs., *Mangifera* sp.
38. *Poecilips nitidipennis* SCHEDL
Kuala Semanok, Niah, Tatau, Tg. Mani ; 5 exs., *Mangifera* sp., 2 exs., *Parishia* sp., 2 exs., *Dipterocarpus* sp., 1 ex., *Shorea* sp., 45 exs., unidentified log
39. *Poecilips subcribosus* (BLANDFORD)
Various shipment localities ; 6♂363♀, *Anisoptera* sp., 5♂20♀, *Dipterocarpus* sp., 1♂91♀, *Dryobalanops* sp., 52♀, *Shorea* sp., 25♀, *Vatica* sp., 4♀, *Palaquium* sp.
40. *Poecilips variabilis* (BEESON)
Tg. Mani ; 1 ex., *Shorea* sp.
41. *Eidophelus borneensis* BROWNE
Tg. Baram, Tg. Mani ; 38♂47♀, *Terminalia* sp.
42. *Acanthotomicus octodentatus* BROWNE
Sandakan, Niah, Sejingkat ; 7♂3♀, *Parishia* sp., 30♂21♀, *Koompassia excelsa*, 1♂, *Artocarpus* sp.
43. *Acanthotomicus peregrinus* SCHEDL
Kimanis, Kuala Madai, Lahad Datu, Tagasan, Tg. Mani ; 213♂235♀, *Canarium* sp., 8♂10♀, *Terminalia* sp.

44. *Acanthotomicus perexiguus* (BLANDFORD)

Kudat, Sandakan, Tagasan; 30♂25♀, *Canarium* sp., 3♂13♀, *Artocarpus* sp., 1♂, *Ficus* sp.

45. *Acanthotomicus tropicus* SCHEDL

Madai, Semporna; 43♂32♀, *Dialium* sp.

46. *Arixyleborus granifer* (EICHHOFF)

Various shipment localities; 1♀, *Agathis* sp., 16♀, *Canarium* sp., 1♀, *Octomeles sumatrana*, 2♀, *Anisoptera* sp., 1♂80♀, *Dipterocarpus* sp., 1♂24♀, *Dryobalanops* sp., 125♀, *Shorea* sp., 1♀, Sapotaceae sp.

47. *Arixyleborus granulifer* (EGGERS)

Various shipment localities; 7♀, *Gluta* or *Melanorroea* sp., 156♀, *Parishia* sp., 2♀, *Alstonia* sp., 9♀, *Agathis* sp., 1♀, *Durio* sp., 3♂69♀, *Canarium* sp., 1♀, *Kokoona* sp., 2♀, *Octomeles sumatrana*, 27♀, *Anisoptera* sp., 131♂4,249♀, *Dipterocarpus* sp., 28♂928♀, *Dryobalanops* sp., 31♂1,561♀, *Shorea* sp., 1♀, *Vatica* sp., 6♀, *Trichadenia philippinensis*, 52♀, *Calophyllum* sp., 2♀, *Sindora* sp., 13♀, *Dactylocladus stenostachys*, 1♂1♀, *Artocarpus* sp., 1♂40♀, Sapotaceae sp., 2♀, *Tarrietia* sp.

48. *Arixyleborus hirsutulus* SCHEDL

Various shipment localities; 4♀, *Anisoptera* sp., 3♂588♀, *Dipterocarpus* sp., 2♂129♀, *Dryobalanops* sp., 120♀, *Shorea* sp., 1♀, *Artocarpus* sp., 1♀, Sapotaceae sp.

49. *Arixyleborus mediosectus* (EGGERS)

Banggi, Kudat, Marudu Bay, Tambisan, Tawau, Weston, Bintulu, Niah; 6♂50♀, *Dipterocarpus* sp., 1♀, *Shorea* sp., 1♀, *Toona* sp.

50. *Arixyleborus minor* (EGGERS)

Kimanis, Tambisan, Bintulu; 54♀, *Dryobalanops* sp., 7♀, *Shorea* sp.

51. *Arixyleborus puberulus* (BLANDFORD)

Kimanis, Kudat, Bintulu, Tatau; 2♀, *Canarium* sp., 1♀, *Dipterocarpus* sp., 6♀, *Dryobalanops* sp., 12♀, *Shorea* sp.

52. *Arixyleborus rugosipes* HOPKINS

Various shipment localities; 1♂15♀, *Buchanania* sp., 1♂17♀, *Campnosperma* sp., 9♀, *Gluta* or *Melanorroea* sp., 21♀, *Mangifera* sp., 1♂15♀, *Parishia* sp., 1♀, *Alstonia* sp., 1♀, *Dyera* sp., 22♀, *Agathis* sp., 1♀, *Durio* sp., 4♂104♀, *Canarium* sp., 3♀, *Terminalia* sp., 2♀, *Octomeles sumatrana*, 4♂96♀, *Anisoptera* sp., 525♂15,305♀, *Dipterocarpus* sp., 65♂1,739♀, *Dryobalanops* sp., 85♂5,621♀, *Shorea* sp., 10♂77♀, *Vatica* sp., 1♀, *Trichadenia philippinensis*, 1♂3♀, *Lauraceae* sp., 2♀, *Planchonia* sp., 7♀, *Sindora* sp., 6♀, *Dactylocladus stenostachys*, 5♀, *Sandoricum* sp., 2♀, *Artocarpus* sp., 3♀, *Myristicaceae* sp., 1♀, *Eugenia* sp., 9♀, Sapotaceae sp., 1♀, *Duabanga moluccana*, 2♀, *Pterospermum* sp., 8♀, *Scaphium* sp., 25♀, *Tarrietia* sp.

53. *Arixyleborus suturalis* (EGGERS)

Kudat; 1♀, *Dryobalanops* sp.

54. *Xylosandrus crassiusculus* (MOTSCHULSKY)

Various shipment localities; 71♀, *Cluta* or *Melanorroea* sp., 1♀, *Parishia* sp., 1♀, *Agathis* sp., 12♀, *Canarium* sp., 2♀, *Octomeles sumatrana*, 14♀, *Anisoptera* sp., 1♂117♀, *Dipterocarpus* sp., 25♀, *Dryobalanops* sp., 105♀, *Shorea* sp., 1♀, *Sapium* sp., 1♀, Lauraceae

sp., 3♂21♀, *Acacia* sp., 897♀, *Albizia* sp., 1♀, *Koompassia malaccensis*, 1♀, *Sindora* sp., 1♀, *Dactylocladus stenostachys*, 15♀, *Eucalyptus deglupta*, 5♀, *Sapotaceae* sp., 62♀, *Gmelina arborea*

55. *Xylotrypes morigerus* (BLANDFORD)

Suai; 2♂4♀, *Shorea* sp.

56. *Stresocranus bicolor* BROWNE

Kimanis, Tg. Mani; 1♀, *Dryobalanops* sp., 2♀, *Shorea* sp.

57. *Streptocranus longispinus* BROWNE

Sejingkat; 1♂3♀, *Shorea* sp.

58. *Xyleborus abscissus* BROWNE

Kimanis, Kudat, Sindomin, Sipitang, Tawau, Bintulu, Kuala Semanok, Miri, Suai, Tg. Mani; 1♀, *Annonaceae* sp., 5♀, *Dyera* sp., 9♀, *Canarium* sp., 1♀, *Octomeles sumatrana*, 1♂17♀, *Anisoptera* sp., 30♀, *Dipterocarpus* sp., 4♀, *Dryobalanops* sp., 95♀, *Shorea* sp., 3♀, *Vatica* sp., 1♀, *Dactylocladus stenostachys*, 1♀, *Combretocarpus* sp.

59. *Xyleborus affinis* EICHHOFF

Various shipment localities; 1♀, *Buchanania* sp., 2♀, *Campnosperma* sp., 34♀, *Gluta* or *Melanorrhoea* sp., 1♂58♀, *Mangifera* sp., 27♀, *Parishia* sp., 11♀, *Annonaceae* sp., 19♀, *Alstonia* sp., 10♀, *Dyera* sp., 18♀, *Agathis* sp., 1♀, *Durio* sp., 4♂141♀, *Canarium* sp., 1♀, *Lophopetalum* sp., 1♂6♀, *Terminalia* sp., 34♀, *Octomeles sumatrana*, 3♂108♀, *Anisoptera* sp., 18♂1,038♀, *Dipterocarpus* sp., 1♂80♀, *Dryobalanops* sp., 1♂10♀, *Hopea* sp., 3♂439♀, *Shorea* sp., 1♀, *Upuna borneensis*, 1♂30♀, *Vatica* sp., 16♀, *Trichadenia philippinensis*, 1♀, *Gonystylus* sp., 1♀, *Cratoxylum arborescens*, 2♀, *Albizia* sp., 11♀, *Intsia* sp., 1♂36♀, *Koompassia malaccensis*, 15♀, *K. excelsa*, 1♂36♀, *Sindora* sp., 1♀, *Michelia* sp., 49♀, *Dactylocladus stenostachys*, 2♀, *Artocarpus* sp., 4♂53♀, *Parartocarpus* sp., 9♂70♀, *Sandoricum* sp., 6♀, *Myristicaceae* sp., 1♀, *Xanthophyllum* sp., 2♂15♀, *Combretocarpus* sp., 11♀, *parinari* sp., 1♀, *Neonauclea* sp., 1♀, *Pometia* sp., 1♀, *Palaquium* sp., 3♀, *Planchonella* sp., 11♀, *Sapotaceae* sp., 2♀, *Ailanthes integrifolia*, 2♀, *Irvingia malayana*, 5♀, *Duabanga* sp., 16♀, *Pterygota horsfieldii*, 31♀, *Scaphium* sp., 35♀, *Tarrietia* sp., 2♂ 9♀, *Tetramerista glabra*, 1♀, *Pentace* sp.

60. *Xyleborus agnatus* EGGERS

Various shipment localities; 4♀, *Durio* sp., 1♀, *Canarium* sp., 1♀, *Kokoona* sp., 7♂311♀, *Dipterocarpus* sp., 1♂45♀, *Dryobalanops* sp., 25♀, *Shorea* sp., 1♂3♀, *Calophyllum* sp., 1♀, *Koompassia malaccensis*, 1♂13♀, *Dactylocladus stenostachys*, 2♀, *Combretocarpus* sp., 5♀, *Sapotaceae* sp., 1♀, *Tarrietia* sp., 1♀, *Koompassia malaccensis*

Xyleborus agnatus mesocompactus SCHEDL

Banggi, Bintulu, Tatau, Tg. Mani; 17♀, *Dipterocarpus* sp.

61. *Xyleborus amphicranoides* HAGEDORN

Kudat, Balingian, Bintulu, Sejingkat, Tatau, Tg. Mani; 2♀, *Octomeles sumatrana*, 2♀, *Parartocarpus* sp., 1♀, *Ailanthes integrifolia*, 6♀, *Pterygota horsfieldii*, 1♀, *Scaphium* sp.

Xyleborus amphicranoides parvior BROWNE

Tatau; 2♀, unidentified log

62. *Xyleborus amplexicauda* HAGEDORN

Kimanis, Kudat, Marudu Bay, Bintulu, Kuala Semanok, Miri, Tatau, Tg. Baram, Tg.

Mani, Tg. Salirong ; 34♀, *Anisoptera* sp., 94♀, *Dipterocarpus* sp., 3♀, *Dryobalanops* sp., 27♀, *Hopea* sp., 33♀, *Shorea* sp., 26♀, *Vatica* sp.

63. *Xyleborus bicolor* BLANDFORD

Bintulu, Suai, Tg. Mani ; 1♀, *Annonaceae* sp., 9♀, *Dyera* sp.

64. *Xyleborus bidentatus* (MOTTSCHULSKY)

Various shipment localities ; 1♀, *Alstonia* sp., 5♀, *Agathis* sp., 2♀, *Dyera* sp., 6♀, *Canarium* sp., 4♀, *Anisoptera* sp., 5♂73♀, *Dipterocarpus* sp., 5♀, *Dryobalanops* sp., 2♂168♀, *Shorea* sp., 1♀, *Upuna borneensis*, 1♀, *Koompassia malaccensis*, 15♀, *Sindora* sp., 2♂5♀, *Dactylocladus stenostachys*, 1♀, *Scaphium* sp.

65. *Xyleborus borneensis* BROWNE

Bintulu, Tatau, Tg. Mani ; 2♂12♀, *Dipterocarpus* sp.

66. *Xyleborus brunneipes* EGGLERS

Kudat, Bintulu, Tg. Mani ; 3♀, *Octomeles sumatrana*, 1♀, *Parartocarpus* sp.

67. *Xyleborus cavuloides* BROWNE

Bintulu, Tg. Mani ; 70♀, *Dipterocarpus* sp.

68. *Xyleborus ciliatoformis* SCHEDL

Bintulu ; 3♀, *Vatica* sp.

69. *Xyleborus circumcisus* SAMPSON

Kudat, Suai ; 6♀, *Canarium* sp.

70. *Xyleborus cognatus* BLANDFORD

Various shipment localities ; 6♂157♀, *Gluta* or *Melanorroeaa* sp., 1♀, *Mangifera* sp., 30♀, *Parishia* sp., 1♂11♀, *Annonaceae* sp., 9♀, *Alstonia* sp., 27♀, *Dyera* sp., 4♀, *Agathis* sp., 1♀, *Durio* sp., 1♀, *Canarium* sp., 4♀, *Terminalia* sp., 1♂130♀, *Anisoptera* sp., 24♂935♀, *Dipterocarpus* sp., 49♂, *Dryobalanops* sp., 4♂377♀, *Shorea* sp., 3♀, *Vatica* sp., 2♀, *Fagaceae* sp., 1♀, *Homalium* sp., 12♀, *Calophyllum* sp., 1♀, *Koompassia malaccensis*, 1♀, *K. excelsa*, 5♂49♀, *Pseudosindora* sp., 1♂30♀, *Sindora* sp., 1♀, *Azadirachta excelsa*, 1♂13♀, *Sandoricum* sp., 1♂38♀, *Dactylocladus stenostachys*, 18♀, *Parartocarpus* sp., 5♀, *Xanthophyllum* sp., 9♀, *Combretocarpus* sp., 3♀, *Parinari* sp., 3♀, *Pometia* sp., 25♀, *sapotaceae* sp., 1♀, *Tetramerista glabra*

71. *Xyleborus concisus* BLANDFORD

Kimanis, Kudat, Tawau, Wallace Bay, Bintulu, Kuala Semanok, sejinkat, Suai, Tg. Mani ; 1♀, *Gluta* or *Melanorroeaa* sp., 2♀, *Dyera* sp., 3♀, *Canarium* sp., 4♀, *Octomeles sumatrana*, 1♀, *Anisoptera* sp., 1♀, *Dipterocarpus* sp., 9♀, *Hopea* sp., 49♀, *Shorea* sp., 8♀, *Michelia* sp.

72. *Xyleborus costatomorphus* SCHEDL

Banggi, Jambongan, Sandakan, Tg. Mani ; 3♂20♀, *Dipterocarpus* sp., 20♀, *Shorea* sp.

73. *Xyleborus cryphalooides* SCHEDL

Tawau, Bintulu, Kuala Semanok, Suai, Tatau, Tg. Baram ; 1♀, *Dyera* sp., 2♂34♀, *Dipterocarpus* sp., 11♀, *Dryobalanops* sp., 9♀, *Shorea* sp.

74. *Xyleborus cylindromorphus* EGGLERS

Kudat, Sandakan, Tambisan, Tawau, Bintulu, Sibuti, Suai, Tatau, Tg. Baram, Tg. Mani ; 1♀, *Anisoptera* sp., 19♀, *Dipterocarpus* sp., 4♂56♀, *Dryobalanops* sp., 1♀, *Hopea* sp., 2♂19♀, *Shorea* sp., 1♀, *Vatica* sp.

75. *Xyleborus dalbergiae* EGGER

Kimanis, Kudat, Tawau, Wallace Bay ; 2♀, *Dipterocarpus* sp., 1♀, *Dryobalanops* sp., 7♀, *Shorea* sp.

76. *Xyleborus dentipennis* BROWNE

Marudu Bay, Tatau; 6♀, *Dipterocarpus* sp., 3♀, *Shorea* sp.

77. *Xyleborus destruens* BLANDFORD

Kudat, Madai, Sandakan, Bintulu, Tg. Mani; 1♀, *Parishia* sp., 4♀, *Octomeles sumatrana*, 1♀, *Vatica* sp., 1♀, *Homalium* sp., 6♀, *Gonystylus* sp., 9♀, *Parartocarpus* sp.

78. *Xyleborus dolosus* BLANDFORD

Various shipment localities; 2♀, *Buchanania* sp., 3♀, *Gluta* or *Melanorroea* sp., 9♀, *Parishia* sp., 1♀, *Annoaceae* sp., 1♀, *Canarium* sp., 1♀, *Octomeles sumatrana*, 3♂ 281♀, *Anisoptera* sp., 17♂ 1,135♀, *Dipterocarpus* sp., 5♂ 170♀, *Dryobalanops* sp., 74♀, *Hopea* sp., 7,343♀, *Shorea* sp., 3♀, *Upuna borneensis*, 12♀, *Vatica* sp., 3♀, *Sindora* sp., 1♀, *Palaquium* sp., 5♀, *Sapotaceae* sp.

79. *Xyleborus emarginatus* EICHHOFF

Various shipment localities; 5♀, *Buchanania* sp., 14♀, *Gluta* or *Melanorroea* sp., 10♀, *Mangifera* sp., 12♀, *Parishia* sp., 14♀, *Annonaceae* sp., 2♀, *Alstonia* sp., 1♂ 85♀, *Dyera* sp., 10♀, *Agathis* sp., 8♀, *Durio* sp., 5♂ 148♀, *Canarium* sp., 2♀, *Lophopetalum* sp., 2♀, *Terminalia* sp., 8♀, *Octomeles sumatrana*, 9♂ 333♀, *Anisoptera* sp., 38♂ 1,570♀, *Dipterocarpus* sp., 2♂ 154♀, *Dryobalanops* sp., 1♀, *Hopea* sp., 15♂ 975♀, *Shorea* sp., 3♀, *Upuna borneensis*, 16♀, *Vatica* sp., 4♀, *Quercus omalokos*, 7♀, *Gonystylus* sp., 1♀, *Calophyllum* sp., 1♀, *Litsea* sp., 2♀, *Albizia* sp., 5♀, *Dialium* sp., 2♀, *Intsia* sp., 1♂ 40♀, *Koompassia malaccensis*, 3♀, *K. excelsa*, 1♀, *Pseudosindora* sp., 1♀, *Michelia* sp., 1♂ 12♀, *Dactylocladus stenostachys*, 2♀, *Artocarpus* sp., 5♀, *Parartocarpus* sp., 11♀, *Myristicaceae* sp., 1♂ 13♀, *Eugenia* sp., 1♀, *Combretocarpus* sp., 2♀, *Pometia* sp., 8♀, *Palaquium* sp., 1♀, *Planchonella* sp., 1♂ 15♀, *Sapotaceae* sp., 12♀, *Duabanga* sp., 2♀, *Pterocymbium* ? *beccarii*, 1♀, *Pterygota horsfieldii*, 2♀, *Scaphium* sp., 6♀, *Tarrietia* sp., 5♀, *Tetramerista glabra*, 3♀, *Pentace* sp.

80. *Xyleborus exiguis* (WALKER)

Various shipment localities; 5♀, *Buchanania* sp., 3♀, *Dracontomelon puberulum*, 35♀, *Gluta* or *Melanorroea* sp., 22♀, *Mangifera* sp., 47♀, *Parishia* sp., 1♀, *Spondias* sp., 1♀, *Annonaceae* sp., 124♀, *Agathis* sp., 24♀, *Canarium* sp., 1♀, *Terminalia* sp., 2♂ 42♀, *Anisoptera* sp., 21♂ 1,357♀, *Dipterocarpus* sp., 4♂ 238♀, *Dryobalanops* sp., 2♂ 396♀, *Shorea* sp., 1♀, *Gonystylus* sp., 5♀, *Calophyllum* sp., 43♀, *Cratoxylum arborescens*, 1♂ 82♀, *Albizia* sp., 27♀, *Koompassia malaccensis*, 11♀, *Pseudosindora* sp., 2♂ 125♀, *Sindora* sp., 16♀, *Dactylocladus stenostachys*, 2♀, *Sandoricum* sp., 6♀, *Myristicaceae* sp., 3♀, *Xanthophyllum* sp., 8♀, *Combretocarpus* sp., 14♀, *Pometia* sp., 17♀, *Sapotaceae* sp., 2♂ 26♀, *Irvingia malayana*, 2♀, *Tarrietia* sp., 8♀, *Pentace* sp., 6♀, *Gmelina arborea*

81. *Xyleborus eximius* SCHEDL

Bintulu, Tg. Salirong; 5♂ 8♀, *Anisoptera* sp., 2♀, *Dipterocarpus* sp.

82. *Xyleborus fallax* EICHHOFF

Various shipment localities; 1♀, *Buchanania* sp., 1♀, *Dracontomelon puberulum*, 1♂ 5♀, *Gluta* or *Melanorroea* sp., 2♀, *Annonaceae* sp., 4♀, *Alstonia* sp., 2♂ 34♀, *Dyera* sp., 7♀, *Agathis* sp., 12♀, *Octomeles sumatrana*, 5♂ 231♀, *Anisoptera* sp., 12♂ 832♀, *Dipterocar-*

pus sp., 1♂87♀, *Dryobalanops* sp., 11♂703♀, *Shorea* sp., 27♀, *Vatica* sp., 8♀, *Gonystylus* sp., 1♀, *Calophyllum* sp., 1♀, *Lauraceae* sp., 1♀, *Sindora* sp., 3♀, *Dactylocladus stenostachys*, 2♀, *Parartocarpus* sp., 1♀, *Myristicaceae* sp., 1♀, *Eugenia* sp., 7♀, *Planchonella* sp., 7♀, *Sapotaceae* sp., 1♀, *Ailanthus integrifolia*, 1♀, *Scaphium* sp.

83. *Xyleborus ferrugineus* (FABRICIUS)

Various shipment localities; ♀, *Mangifera* sp., 3♀, *Parishia* sp., 3♀, *Dyera* sp., 5♀, *Canarium* sp., 1♀, *Octomeles sumatrana*, 2♂55♀, *Anisoptera* sp., 2♂153♀, *Dipterocarpus* sp., 26♀, *Dryobalanops* sp., 1♂72♀, *Shorea* sp., 6♀, *Calophyllum* sp., 6♀, *Koompassia malaccensis*, 3♂27♀, *K. excelsa*, 11♀, *Sindora* sp., 4♂103♀, *Dactylocladus stenostachys*, 3♀, *Toona ? sureni*, 1♀, *Combretocarpus* sp., 4♀, *Palaquium* sp., 3♀, *Sapotaceae* sp., 5♀, *Tarrietia* sp., 1♀, *Tetramerista glabra*

84. *Xyleborus funereus* LEA

Kudat; 2♀, *Octomeles sumatrana*

85. *Xyleborus glabratulus* BROWNE

Tawau, Bintulu; 5♀, *Dryobalanops* sp.

86. *Xyleborus hastatus* SCHEDL

Tawau, Bintulu, Tatau; 8♀, *Dryobalanops* sp., 1♂38♀, *Shorea* sp.

87. *Xyleborus hatanakia* BROWNE

Tawau, Bintulu, Tatau; 8♀, *Dryobalanops* sp., 1♂38♀, *Shorea* sp.

88. *Xyleborus insignis* BROWNE

Wallace Bay; 3♀, *Albizia* sp.

89. *Xyleborus interjectus* BLANDFORD

Banggi, Kudat, Bintulu, Miri, Sejingkat, Sibuti, Suai, Tatau, Tg. Baram, Tg. Mani; 3♀, *Mangifera* sp., 1♀, *Dyera* sp., 38♀, *Octomeles sumatrana*, 9♀, *Anisoptera* sp., 12♀, *Dipterocarpus* sp., 5♀, *Shorea* sp., 17♀, *Endospermum ? medullosum*, 9♀, *Trichadenia philippinensis*, 19♀, *Intsia* sp., 3♀, *Koompassia malaccensis*, 7♀, *Antiaris* sp., 5♀, *Parartocarpus* sp., 2♀, *Pometia* sp., 1♀, *Sapotaceae* sp., 1♂11♀, *Ailanthus integrifolia*, 4♂52♀, *Pterygota horsfieldii*, 6♀, *Scaphium* sp.

90. *Xyleborus javanus* EGGERS

Kimanis; 6♀, *Anisoptera* sp., 1♀, *Shorea* sp., 4♀, *Gmelina arborea*

91. *Xyleborus justus* SCHEDL

Kimanis, Bintulu, Suai, Tatau, Tg. Mani; 1♀, *Canarium* sp., 6♀, *Dipterocarpus* sp., 1♂57♀, *Shorea* sp., 2♀, *Vatica* sp.

92. *Xyleborus katoi* BROWNE

Kudat, Tatau, Tg. Mani; 2♀, *Dipterocarpus* sp., 2♀, *Shorea* sp.

93. *Xyleborus kelantanus* SCHEDL

Kudat, Bintulu, Kuala Semanok, Tg. Mani; 4♀, *Dipterocarpus* sp., 3♀, *Dryobalanops* sp., 5♀, *Shorea* sp.

94. *Xyleborus laevis* EGGERS

Bintulu; 1♀, unidentified log

95. *Xyleborus lewisi* BLANDFORD

Kimanis, Tawau, Kuala Semanok; 1♀, *Agathis* sp., 1♀, *Canarium* sp., 2♀, *Anisoptera* sp.

96. *Xyleborus macropterus* SCHEDL

Various shipment localities ; 99♂878♀, *Dipterocarpus* sp., 14♂141♀, *Dryobalanops* sp., 2♀, *Hopea* sp., 50♂483♀, *Shorea* sp., 1♂10♀, *Vatica* sp., 1♀, Sapotaceae sp.

97. *Xyleborus mancus* BLANDFORD

Wallace Bay ; 3♀, *Albizia* sp.

98. *Xyleborus micrographus* SCHEDL

Bintulu ; 1♂4♀, *Shorea* sp.

99. *Xyleborus minor* STEBBING

Tawau, Kuala Semanok, Tg. Baram ; 1♀, *Canarium* sp., 1♀, *Dipterocarpus* sp., 1♀, *Irvingia malayana*

100. *Xyleborus multipunctatus* BROWNE

Various shipment localities ; 3♂61♀, *Canarium* sp.

101. *Xyleborus nodulosus* EGGERS

Kudat, Tawau, Tatau, Tg. Baram, Tg. Mani, Tg. Salirong ; 4♀, *Octomeles sumatrana*, 1♀, *Anisoptera* sp., 5♀, *Dipterocarpus* sp., 1♀, *Shorea* sp.

102. *Xyleborus nudibrevis* SCHEDL

Bintulu, Suai ; 1♀, *Shorea* sp., 2♀, *Gonostylus* sp.

103. *Xyleborus nugax* SCHEDL

Tawau ; 1♀, *Dipterocarpus* sp.

104. *Xyleborus nutans* SCHEDL

Bintulu, Suai, Tatau, Tg. Mani ; 12♂84♀, *Parishia* sp., 32♀, *Canarium* sp., 10♀, *Dipterocarpus* sp., 13♀, *Cratoxylum arborescens*

105. *Xyleborus perforans* (WOLLASTON)

Various shipment localities ; 525♂41,644♀, were collected from trees in 78 genera 37 families

106. *Xyleborus piceus* (MOTSCHULSKY)

Banggi, Kudat, Sandakan, Tawau, Bintulu, Sejingkat, Tg. Baram, Tg. Mani ; 1♀, *Canarium* sp., 15♀, *Octomeles sumatrana*, 2♀, *Anisoptera* sp., 4♀, *Dipterocarpus* sp., 4♀, *Shorea* sp., 14♀, *Hydnocarpus* sp., 2♀, *Gonostylus* sp., 4♀, *Antiaris* sp., 4♀, *Parartocarpus* sp., 1♀, *Ailanthes integrifolia*

107. *Xyleborus pruinosus* BLANDFORD

Kudat, Suai, Tatau, Tg. Mani ; 2♂103♀, *Canarium* sp.

108. *Xyleborus pseudocylindricus* EGGERS

Kudat, Tambisan, Bintulu, Kuala Semanok ; 3♀, *Dryobalanops* sp., 2♂28♀, *Shorea* sp.

109. *Xyleborus pseudopilifer* SCHEDL

Various shipment localities ; 2♀, *Canarium* sp., 2♀, *Terminalia* sp., 1♂18♀, *Anisoptera* sp., 219♂1,835♀, *Dipterocarpus* sp., 10♂130♀, *Dryobalanops* sp., 44♂470♀, *Shorea* sp., 11♂67♀, *Vatica* sp., 1♀, Myristicaceae sp., 1♀, *Pometia* sp., 1♀, Sapotaceae sp., 1♀, *Scaphium* sp.

110. *Xyleborus pumilus* EGGERS

Madai, Sindomin, Bintulu ; 1♀, *Canarium* sp., 1♀, *Shorea* sp., 1♀, *Artocarpus* sp., 7♀, Sapotaceae sp.

111. *Xyleborus punctatissimus* EICHHOFF

- Kudat, Tawau, Bintulu, Miri, Tg. Baram, Tg. Mani ; 1♀, *Dipterocarpus* sp., 13♀, *Shorea* sp., 1♀, Sapotaceae sp.
112. *Xyleborus quadraticollis* EGGER
Kudat ; 2♀, *Octomeles sumatrana*
133. *Xyleborus sejugatus* SCHEDL
Kimanis, Tambisan, Bintulu, Lawas, Tatau, Tg. Baram ; 1♀, *Agathis* sp., 5♀, *Dipterocarpus* sp., 4♀, *Dryobalanops* sp., 2♀, *Shorea* sp.
114. *Xyleborus sexspinatus* SCHEDL
Various shipment localities ; 11♂ 161♀, *Dipterocarpus* sp., 3♂ 18♀, *Dryobalanops* sp., 6♂ 62♀, *Shorea* sp., 1♀, *Vatica* sp., 1♀, *Sandricum* sp., 1♀, *Tarrietia* sp.
115. *Xyleborus shoreae* (STEBBING)
Kudat, Bintulu ; 1♀, *Dipterocarpus* sp., 1♀, *Shorea* sp.
116. *Xyleborus siclus* SCHEDL
Various shipment localities : 1♀, *Kokoona* sp., 1♀, *Anisoptera* sp., 24♂ 226♀, *Dipterocarpus* sp., 2♂ 47♀, *Dryobalanops* sp., 14♀, *Shorea* sp., 1♀, *Kayea* sp., ♀, *Sindora* sp.
117. *Xyleborus similis* FERRARI
Various shipment localities ; 1♀, *Dracontomelon puberulum*, 5♀, *Gluta* or *Melanorroea* sp., 17♀, *Mangifera* sp., 1♀, *Annonaceae* sp., 2♀, *Alstonia* sp., 2♀, *Dyera* sp., 3♀, *Agathis* sp., 2♂ 42♀, *Durio* sp., 24♀, *Canarium* sp., 1♀, *Kokoona* sp., 30♀, *Lophopetalum* sp., 6♀, *Terminalia* sp., 128♀, *Octomeles sumatrana*, 1♀, *Dillenia* sp., 104♀, *Anisoptera* sp., 30♂ 1,145♀, *Dipterocarpus* sp., 3♂ 162♀, *Dryobalanops* sp., 9♂ 248♀, *Shorea* sp., 1♀, *Vatica* sp., 1♀, *Drypetes* sp., 1♀, *Quercus* *omalokos*, 8♀, *Hydnocarpus* sp., 1♂ 5♀, *Trichadenia philippinensis*, 1♀, *Calophyllum* sp., 2♀, *Cratoxylum arborescens*, 1♂ 15♀, *Lauraceae* sp., 6♂ 86♀, *Albizia* sp., 1♀, *Acacia* sp., 21♀, *Intsia* sp., 1♂ 13♀, *Koompassia malaccensis*, 2♀, *K. excelsa*, 1♂ 32♀, *Sindora* sp., 1♀, *Michelia* sp., 3♂ 27♀, *Dactylocladus stenostachys*, 1♀, *Chisocheton* sp., 2♀, *Toona* ? *sureni*, 1♀, *Antiaris* sp., 2♀, *Artocarpus* sp., 17♀, *Parartocarpus* sp., 1♀, *Myristicaceae* sp., 1♀, *Eucalyptus deglupta*, 1♀, *Eugenia* sp., 2♀, *Xanthophylum* sp., 1♀, *Combretocarpus* sp., 1♂ 22♀, *Parinari* sp., 3♀, *Pometia* sp., 1♂ 16♀, *Palaquium* sp., 1♂ 10♀, Sapotaceae sp., 3♀, *Ailanthus integrifolia*, 1♀, *Irvingia malayana*, 26♀, *Pterygota horsfieldii*, 4♀, *Scaphium* sp., 6♀, *Tarrietia* sp., 4♀, *Pentace* sp., 2♀, *Gmelina arborea*
118. *Xyleborus spicatus* BROWNE
Marudu Bay ; 5♀, *Dipterocarpus* sp.
119. *Xyleborus spinatus* EGGER
Bintulu, Sejingkat, Tatau ; 55♀, *Octomeles sumatrana*, 7♀, unidentified log.
120. *Xyleborus subagnatus* SCHEDL
Kimanis, Lawas ; 1♀, *Agathis* sp., 2♀, Sapotaceae sp.
121. *Xyleborus subcostatus* EICHHOFF
Various shipment localities ; 17♂ 64♀, *Gluta* or *Melanorroea* sp., 6♂ 20♀, *Parishia* sp., ♀, *Annonaceae* sp., 5♀, *Dyera* sp., 1♀, *Agathis* sp., 2♀, *Canarium* sp., 1♂ 22♀, *Anisoptera* sp., 23♂ 150♀, *Dipterocarpus* sp., 1♂ 7♀, *Dryobalanops* sp., 16♂ 152♀, *Shorae* sp., 2♀, *Lauraceae* sp., 1♂ 26♀, *Koompassia malaccensis*, 12♂ 53♀, *Pseudosindora* sp., 16♀, *Dactylocladus stenostachys*, 1♀, *Parartocarpus* sp., 3♂ 9♀, Sapotaceae sp., 1♀, *Tarrietia* sp.

122. *Xyleborus subdolosus* SCHEDL

Kimanis, Kudat, Tambisan, Bintulu, Kuala Semanok, Suai, Tatau, Tg. Baram, Tg. Mani ; 46♀, *Anisoptera* sp., 14♀, *Dipterocarpus* sp., 3♀, *Dryobalanops* sp., 4♀, *Hopea* sp., 73♀, *Shorea* sp., 16♀, *Vatica* sp.

123. *Xyleborus tuberculosus* BROWNE

Tambisan, Bintulu, Sematan, Tg. Mani ; 10♀, *Dipterocarpus* sp., 1♀, *Dryobalanops* sp., 1♀, *Shorea* sp.

124. *Xyleborus tunggali* SCHEDL

Madai, Tambisan, Tawau, Bintulu, Suai, Tg. Baram, Tg. Mani, Tg. Salirong ; 2♂ 34♀, *Canarium* sp., 8♀, *Dipterocarpus* sp.

125. *Xyleborus ursulus* EGGERNS

Kimanis, Bintulu ; 3♀, *Shorea* sp.

126. *Xyleborus volvulus* (FABRICIUS)

Various shipment localities ; 42♀, *Dracontomelon puberulum*, 10♀, *Gluta* or *Melanorrhoea* sp., 21♀, *Mangifera* sp., 17♀, *Parishia* sp., 2♀, *Annonaceae* sp., 1♀, *Alstonia* sp., 2♀, *Dyera* sp., 11♀, *Agathis* sp., 1♀, *Durio* sp., 1♂ 50♀, *Canarium* sp., 1♀, *Lophopetalum* sp., 2♀, *Terminalia* sp., 16♀, *Octomeles sumatrana*, 1♂ 173♀, *Anisoptera* sp., 4♂ 1,091♀, *Dipterocarpus* sp., 25♀, *Dryobalanops* sp., 1♀, *Hopea* sp., 3♂ 319♀, *Shorea* sp., 4♀, *Vatica* sp., 1♀, *Trichadenia philippinensis*, 2♀, *Gonostylus* sp., 4♀, *Calophyllum* sp., 1♀, *Cratoxylum arborescens*, 2♀, *Lauraceae* sp., 12♀, *Planchonia* sp., 4♂ 236♀, *Albizia* sp., 21♀, *Intsia* sp., 2♂ 6♀, *Koompassia malaccensis*, 2♀, *K. excelsa*, 6♀, *Pseudosindora* sp., 3♀, *Sindora* sp., 12♀, *Dactylocladus stenostachys*, 1♀, *Azadirachta excelsa*, 3♀, *Sandoricum* sp., 1♀, *Toona* ? *sureni*, 1♀, *Antiaris* sp., 9♀, *Artocarpus* sp., 4♀, *Ficus* sp., 1♂ 26♀, *Parartocarpus* sp., 5♀, *Myristicaceae* sp., 3♀, *Eugenia* sp., 2♀, *Xanthophyllum* sp., 1♂ 62♀, *Combretocarpus* sp., 1♀, *Anthocephalus chinensis*, 1♀, *Neonauclea* sp., 2♀, *Pometia* sp., 1♀, *Planchonella* sp., 34♀, *Sapotaceae* sp., 1♀, *Ailanthus integrifolia*, 24♀, *Irvingia malayana*, 1♀, *Duabanga moluccana*, 10♀, *Pterocymbium* ? *beccarri*, 1♀, *Pterospermum* sp., 6♀, *Pterygota horsfieldii*, 24♀, *Scaphium* sp., 1♀, *Sterculia* sp., 6♀, *Tarrietia* sp., 1♂ 4♀, *Tetramerista glabra*

127. *Cryptoxyleborus dryobalanopsis* SCHEDL

Tatau ; 1♀, *Dipterocarpus* sp.

128. *Cryptoxyleborus major* BROWNE

Bintulu, Tatau, Tg. Mani ; 12♀, *Dipterocarpus* sp., 1♀, *Shorea* sp.

129. *Cryptoxyleborus shoreae* BROWNE

Bintulu ; 1♀, *Dipterocarpus* sp.

130. *Cryptoxyleborus subnaevus* SCHEDL

Various shipment localities ; 1♂ 35♀, *Dipterocarpus* sp., 5♀, *Dryobalanops* sp., 1♂ 144♀, *Shorea* sp.

131. *Schedlia sumatrana* (HAGEDORN)

Kimanis, Tawau, Wallace Bay, Bintulu ; 1♀, *Dipterocarpus* sp., 5♀, *Shorea* sp.

132. *Webbia dasyurus* BROWNE

Kimanis, Tambisan, Bintulu, Tatau, Tg. Mani ; 9♀, *Dipterocarpus* sp., 1♀, *Dryobalanops* sp., 4♀, *Shorea* sp.

133. *Webbia divisus* BROWNE

Bintulu; 22♀, *Shorea* sp.

134. *Webbia multidentatus* BROWNE

Kimanis; 2♀, *Shorea* sp.

135. *Webbia orbicularis* SCHEDL

Kimanis, Bintulu, Tatau; 5♀, *Dipterocarpus* sp., 13♀, *Dryobalanops* sp., 7♀, *Shorea* sp.

136. *Webbia pabo* SAMPSON

Kudat, Weston; 3♀, *Dipterocarpus* sp., 21♀, *Dryobalanops* sp.

137. *Webbia penicillatus* (HAGEDORN)

Bintulu, Tg. Mani; 4♀, *Dipterocarpus* sp., 4♀, *Shorea* sp.

138. *Webbia sarawakensis* SCHEDL

Suai: 3♂118♀, *Palaquium* sp.

139. *Webbia spinipennis* SCHEDL

Kudat, Tg. Mani; 13♀, *Vatica* sp.

140. *Webbia 18-spinatus* SAMPSON

Kimanis, Kudat, Sandakan, Tawau, Wallace Bay, Bintulu, Suai, Tatau, Tg. Baram, Tg. Mani; 1♂31♀, *Dipterocarpus* sp., 8♀, *Dryobalanops* sp., 1♂10♀, *Shorea* sp.

141. *Webbia 30-spinatus* SAMPSON

Kudat, Sandakan, Tawau, Wallace Bay, Bintulu, Suai, Tatau, Tg. Baram, Tg. Mani; 10♂260♀, *Dipterocarpus* sp., 2♀, *Dryobalanops* sp., 1♀, *Shorea* sp.

142. *Eccoptopterus gracilipes* (EICHHOFF)

Kimanis, Kudat, Tawau, Bintulu, Lawas, Suai; 3♀, *Agathis* sp., 7♀, *Anisoptera* sp., 1♂3♀, *Dipterocarpus* sp., 9♂112♀, *Shorea* sp., 3♀, Lauraceae sp., 1♀, *Gmelina arborea*

143. *Eccoptopterus limbus* SAMPSON

Kimanis, Suai; 1♂8♀, *Shorea* sp.

144. *Eccoptopterus spinosus* (OLIVIER)

Kudat, Tagasan, Tg. Salirong; 1♀, *Octomeles sumatrana*, 2♀, *Shorea* sp., 4♀, *Vatica* sp., 1♀, Lauraceae sp.