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Chromosome Observations of Tropical Ants in Western Malaysia and Singapore

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In order to investigate the karyotype evolution of ants by using the karyograph method devised by Imai and Crozier (Am. Nat. 116: 537-569, 1980), the second author is collecting ants from all over the world. As a part of the project Imai, Kubota and Kondo had recently the chance to collect tropical ants of Malaysia and Singapore. This is a preliminary report of chromosome numbers of 73 ant species placed in 36 genera, 20 tribes and 5 subfamilies. As the precise identification of species name is practically difficult in ants, we tentatively classified them as sp. 1, 2, 3, . . . based on external morphologies and karyotypes. For the convenience of researchers who are interested in the taxonomy of these ants, we deposited one set of the dry specimens to the Australian National Insect Collection (CSIRO, Canberra, Australia) and also to the Basel Museum (Switzerland). The results are summarized in Table 1.

Table 1. Chromosome numbers of Malaysian ants

Taxa	Chrom. number (n) 2n	Taxa	Chrom. number (n) 2n
SUBFAMILY PONERINAE			
Tribe Platythyreini		<i>Leptogenys</i> sp. 1	38
<i>Probolomyrmex</i> sp.	28	<i>Leptogenys</i> sp. 2	48
Tribe Ectatommini		<i>Diacamma</i> sp.	(18) 36
<i>Gnamptogenys</i> sp. 1	42	<i>Pachycondyla</i> sp.	(11,11+1B)/ 22+2B
<i>Gnamptogenys</i> sp. 2	36		(B-chrom. polymorphism)
Tribe Ponerini		<i>Mesoponera</i> sp. 1	28

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Table 1. Continued

Taxa	Chrom. number (n) 2n	Taxa	Chrom. number (n) 2n
<i>Mesoponera</i> sp. 2	22	<i>Monomorium</i> sp. 2	22
<i>Mesoponera</i> sp. 3	36	<i>Diplorhoptrum</i> sp.	38
<i>Hypoponera</i> sp.	38	<i>Oligomyrmex</i> sp. 1	36
<i>Brachyponera</i> sp.	22	Tribe Myrmecinini	
(Reciprocal translocation)		<i>Acanthomyrmex</i> sp. 1	(11)
Tribe Odontomachini		<i>Acanthomyrmex</i> sp. 2	22
<i>Anochetus</i> sp. 1	24	<i>Pristomyrmex</i> sp.	22
<i>Anochetus</i> sp. 2	(19)	Tribe Myrmicariini	
<i>Odontomachus</i> sp. 1	(22) 44	<i>Myrmicaria</i> sp. 1	44
<i>Odontomachus</i> sp. 2	30,30+1B (B-chrom. polymorphism)	<i>Myrmicaria</i> sp. 2	44
<i>Odontomachus</i> sp. 3	(22) 44	<i>Myrmicaria</i> sp. 3	44
Tribe Cerapachyini		Tribe Tetramoriini	
<i>Cerapachys</i> sp.	(25) 50	<i>Triglyphotrix</i> sp. 1	20
SUBFAMILY PSEUDOMYRMICINAE		<i>Triglyphotrix</i> sp. 2	18
Tribe Pseudomyrmini		<i>Tetramorium</i> sp. 1	22
<i>Tetraponera</i> sp.	44	<i>Tetramorium</i> sp. 3	26
SUBFAMILY MYRMICINAE		<i>Tetramorium</i> sp. 4	14
Tribe Pheidolini		Tribe Attini (?)	
<i>Aphaenogaster</i> sp.	30	<i>Proatta</i> sp.	32
<i>Pheidole</i> sp. 1	20	Tribe Dacetini	
<i>Pheidole</i> sp. 2	(10) 20	<i>Smithistruma</i> sp.	16
<i>Pheidole</i> sp. 3	20	SUBFAMILY DOLICHODERINAE	
<i>Pheidole</i> sp. 4	20	Tribe Dolichoderini	
<i>Pheidole</i> sp. 5	(16, 17) (Robertsonian polymorphism)	<i>Dolichoderus</i> sp.	18
<i>Pheidole</i> sp. 6	20	Tribe Tapinomini	
<i>Pheidole</i> sp. 7	16	<i>Iridomyrmex</i> sp.	18
<i>Pheidole</i> sp. 8	38	<i>Tapinoma</i> sp.	(5) 10
<i>Pheidole</i> sp. 9	18	<i>Technomyrmex</i> sp.	30
<i>Pheidole</i> sp. 10	20	SUBFAMILY FORMICINAE	
Tribe Cardiocondylini		Tribe Plagiolepidini	
<i>Cardiocondyla</i> sp.	40	<i>Anoplolepis</i> sp.	(17) 34
Tribe Crematogastrini		<i>Acropyga</i> sp.	(15)
<i>Crematogaster</i> sp. 1	26	Tribe Camponotini	
<i>Crematogaster</i> sp. 2	36	<i>Camponotus</i> sp. 1	(19)
<i>Crematogaster</i> sp. 3	36	<i>Camponotus</i> sp. 2	(20) 40
<i>Crematogaster</i> sp. 4	24	<i>Camponotus</i> sp. 3	38
Tribe Solenopsidini		<i>Camponotus</i> sp. 4	(18) 36
<i>Monomorium</i> sp. 1	22	<i>Camponotus</i> sp. 5	(20) 40
		<i>Camponotus</i> sp. 6	44
		<i>Polyrhachis</i> sp. 1	(21)

Table 1. Continued

Taxa	Chrom. number (n) 2n	Taxa	Chrom. number (n) 2n
<i>Polyrhachis</i> sp. 2	(21)	<i>Paratrechina</i> sp. 3	28
<i>Polyrhachis</i> sp. 3	20	<i>Paratrechina</i> sp. 4	16
(Pericentric inversion polymorphism)		<i>Paratrechina</i> sp. 5	28
Tribe Lasiini		<i>Prenolepis</i> sp.	34, 36
<i>Paratrechina</i> sp. 1	16		(Robertsonian polymorphism)
<i>Paratrechina</i> sp. 2	26		