

**Appendix A Total number of birds observed in each day in riparian forest along Mae Ngae Gully.**

No	Species	27-Jul-02		24-Aug-02		21-Sep-02		19-Oct-02		16-Nov-02		14-Dec-02		11-Jan-03		8-Feb-03		8-Mar-03		5-Apr-03		3-May-03		7-Jun-03		Total
		mo	ev	mo	ev	mo	ev	mo	ev	mo	ev	mo	ev	mo	ev	mo	ev	mo	ev	mo	ev	mo	ev	mo	ev	
		1	Black Baza ( <i>Avicedae leuphotes</i> )		2					3	5	1		2		2		3		3		4		3		
2	Greater Coucal ( <i>Centropus sinensis</i> )		1					1	2		1			2		2	2		1		2		2		16	
3	Lineated Barbet ( <i>Megaliama lineata</i> )	2	1					1				2				2		2	1		3	1		3	18	
4	Black-crested Bulbul ( <i>Pycnonotus melanicterus</i> )	1	3					5	3	6	3		7	1	5	3		6	3		1	5	3		2	57
5	Grey-headed Parakeet ( <i>Psittacula finschii</i> )									2				1				1				1			5	
6	Greater Racket-tailed Drongo ( <i>Dicrurus paradiseus</i> )	2	3					4	1	3	3	5	2	6	5		6	4	6		3	3	6	3	1	66
7	Crested Kingfisher ( <i>Megceryle lugubris</i> )	1						2		1			1	2			2	1				1			1	12
8	Blue Whistling Thrush ( <i>Myiophonus caeruleus</i> )							2	1				1		3	1		2			2	1		2		15
9	Verditer Flycatcher ( <i>Eumyias thalassina</i> )#												2		1			2								2
10	Red-whiskered Bulbul ( <i>Pycnonotus jocosus</i> )	3						4	2	5		2	4	7	4	6		1	7	4	3	3	2	5	7	69
11	Crested Treeswift ( <i>Hemiprocne coronata</i> )							18	21	12	18	11	7	9		23	10		5	8	13	14	11	7	10	197
12	Common Myna ( <i>Acridotheres tristis</i> )	1						2				1		2		4			3			4			6	23
13	Hill Myna ( <i>Gracula religiosa</i> )	2								1	2	1			2		3	1			3	2			1	18
15	Shikra ( <i>Accipiter badius</i> )		1					1						1				1			2		1		1	8
16	Slaty-backed Forktail ( <i>Enicurus schistaceus</i> )		1					2					2		1			2					3	1		12
17	White-breasted Waterhen ( <i>Amaurornis phoenicurus</i> )		1							1			1								1					4
18	Common Sandpiper ( <i>Actitis hypoleucos</i> )												2	2			3	1	3							11

	Species	27-Jul-02		24-Aug-02		21-Sep-02		19-Oct-02		16-Nov-02		14-Dec-02		11-Jan-03		8-Feb-03		8-Mar-03		5-Apr-03		3-May-03		7-Jun-03		Total
		mo	ev	mo	ev	mo	ev	mo	ev	mo	ev	mo	ev	mo	ev	mo	ev	mo	ev	mo	ev	mo	ev	mo	ev	
		19	Thick-billed Pigeon ( <i>Treron curvirostra</i> )	15						20		85	90		70				22		20				15	
20	Blue-eared Kingfisher ( <i>Alcedo meninting</i> )										1						1				1				3	
21	Asian Emerald Cuckoo ( <i>Chrysococcyx maculatus</i> )									1										1					2	
22	Crested Serpent-Eagle ( <i>Spilornis cheela</i> )	1								1	1	1		1	1			1	2				1		10	
23	Black Drongo ( <i>Dicrurus macrocercus</i> )	2	3					5	2		4	3		3	5	3	6	3		2	3			5	49	
24	Dusky Warbler ( <i>Phylloscopus fuscatus</i> )												1	1		1	1	1							5	
25	Besra ( <i>Accipiter virgatus</i> )																	1		1	1		1		4	
26	Black-backed Forktail ( <i>Enicurus immaculatus</i> )		1																	1		1	2		5	
27	Small Pratincole ( <i>Glareola lactea</i> )																6		7		4				17	
28	House Swift ( <i>Apus affinis</i> )	15						25	10		27	14			34			30	12	15		29			211	
29	Ashy Drongo ( <i>Dicrurus leucophaeus</i> )	1	3					6	10	3	5		12	3	2	5		8	3	2	1	5	6	9	4	88
30	Yellow-footed Pigeon ( <i>Treron phoenicoptera</i> )	5						15	5	10				15	8			10			15		12	5	5	105
31	Velvet-fronted Nuthatch ( <i>Sitta frontalis</i> )						2				4						2						2		10	
32	Common Tailorbird ( <i>Orthotomus sutorius</i> )	2	3					4	2		4	3	5			6	8	3		5	7	6		2	8	68
33	Indian Roller ( <i>Coracias benghalensis</i> )	2						1	2		2	4	2	1	3			4	4			3			3	31
34	Black-headed Bulbul ( <i>Pycnonotus atriceps</i> )		4							3			6	4				9			3			4		33
35	Black-hooded Oriole ( <i>Oriolus xanthornus</i> )	4								6			8			2						6				26
36	White-vented Myna ( <i>Acridotheres cinereus</i> )						5				4					3		5			2		6		2	27



	Species	27-Jul-02		24-Aug-02		21-Sep-02		19-Oct-02		16-Nov-02		14-Dec-02		11-Jan-03		8-Feb-03		8-Mar-03		5-Apr-03		3-May-03		7-Jun-03		Total
		mo	ev	mo	ev	mo	ev	mo	ev	mo	ev	mo	ev	mo	ev	mo	ev	mo	ev	mo	ev	mo	ev	mo	ev	
		55	Blue-throated Barbet ( <i>Megalium asiatica</i> )	2						3	2			3	4	2		1			3	2			2	
56	Long-tailed Shrike ( <i>Lanius schach</i> )						1					1			1			2		2	1		3			11
57	Sooty-headed Bulbul ( <i>Pycnonotus aurigaster</i> )	4	2					6	12	4	8	2	5	9	4	17	4		2	10	11	3		13	2	118
58	Brown Shrike ( <i>Lanius cristatus</i> )													1		1	1									3
59	Ashy Minivet ( <i>Pericrocotus divaricatus</i> )							2					5	4	2						2			2		17
60	Forest Wagtail ( <i>Dendronanthus indicus</i> )							17				1	2	1	1		1									6
61	Great Egret ( <i>Casmerodius albus</i> )									1	6		8	2	2		6									25
62	Red-wattled Lapwing ( <i>Vanellus indicus</i> )						15	6	2			8		2	4								5			27
63	White Wagtail ( <i>Motacilla alba</i> )									3	4	8		4	10	4	6									39
64	Brown Needletail ( <i>Hirundapus giganteus</i> )									8				10			12					9				39
65	Black-shouldered Kite ( <i>Elanus caeruleus</i> )		1						1		1				1					1			1	1		7
66	White-crested Laughingthrush ( <i>Garrulax leucolophus</i> )						4				8	14			10		3			2				12		53
	<b>Total</b>	87	54				204	222	103	201	197	130	184	153	163	84	163	103	100	131	95	121	108	91		2694





**Appendix B Total number of birds observed in each day in deciduous forest.**

No	Species	6-Jul-02		31-Aug-02		28-Sep-02		26-Oct-02		23-Nov-02		21-Dec-02		18-Jan-03		15-Feb-03		15-Mar-03		12-Apr-03		10-May-03		14-Jun-03		Total
		mo	ev	mo	ev	mo	ev	mo	ev	mo	ev	mo	ev	mo	ev	mo	ev	mo	ev	mo	ev	mo	ev	mo	ev	
		1	White-browed Piculet ( <i>Sasia ochracea</i> )		2							1	1			1	1			1		1				
2	Large-billed Crow ( <i>Corvus macrorhynchos</i> )													5												5
3	Greater Racket-tailed Drongo ( <i>Dicrurus paradiseus</i> )	8	2	5	3	6	4	1		4	1			4		6		1		2		6	4		4	61
4	Black-crested Bulbul ( <i>Pycnonotus melanicterus</i> )	4	1	5	1	9				10	3	3				5	3	10	2	12		9	3	10		90
5	White-throated Kingfisher ( <i>Halcyon smyrnensis</i> )		2																		1	1	1	2		7
6	Golden-fronted Leafbird ( <i>Chloropsis aurifrons</i> )	1	1		3	2	2		3	2		2		2				2	2	2	2	1				27
7	Stripe-throated Bulbul ( <i>Pycnonotus finlaysoni</i> )		1							1						1										3
8	Collared Falconet ( <i>Microhierax caerulescens</i> )		1																							1
9	Rufous-fronted Babbler ( <i>Stachyris rufifrons</i> )#		2							6	7	8	10	3	16	23	12	2		6		2		5	9	23
10	Yellow-bellied Warbler ( <i>Abroscopus superciliaris</i> )	2	1		5				5	3		2	5		1		3	2	1	2	1					33
11	Dark-necked Tailorbird ( <i>Orthotomus atrogularis</i> )		2								2	1			9	4	1	2		2	4	5	1	1	1	35
12	Striped Tit-Babbler ( <i>Macronous gularis</i> )#	2	1	5	7	8		9	4	13	7	8	14	2	21	24	8	14	22	9	3	6	4	16	13	24
13	Sooty-headed Bulbul ( <i>Pycnonotus aurigaster</i> )	1		2	9			2	8	7	1	3	1	2	5	2	5	7	18	18		6	6	10	6	119
14	Brown-cheeked Fulvetta ( <i>Alcippe poioicephala</i> )	4				3		2	7	4	4			5	2		4	6	3	2	2	5	11	4	68	
15	Blue-winged Leafbird ( <i>Chloropsis cochinchinensis</i> )	2		2	2		2	6						3	2	1	1	3	2	6	2		3		2	39
16	Streaked Spiderhunter ( <i>Arachnothera magna</i> )	2		1	1	6	1	2	2	4		3	2	1		1				2			1	3	1	33
17	Oriental White-eye ( <i>Zosterops palpebrosus</i> )									2	2	13	7	2	7	5		4	4		2		1	4	8	61
18	Red-throated Flycatcher ( <i>Ficedula parva</i> )#	1						1		2	1							1	1							2

No	Species	6-Jul-02		31-Aug-02		28-Sep-02		26-Oct-02		23-Nov-02		21-Dec-02		18-Jan-03		15-Feb-03		15-Mar-03		12-Apr-03		10-May-03		14-Jun-03		Total	
		mo	ev	mo	ev	mo	ev	mo	ev	mo	ev	mo	ev	mo	ev	mo	ev	mo	ev	mo	ev	mo	ev	mo	ev		
		19	Scarlet Minivet ( <i>Pericrocotus flammeus</i> )	4		4	5	2			3	2			5	4	3	6	4	5	4	6	6	6	2		3
20	Grey-eyed Bulbul ( <i>Iole propinqua</i> )	1		4		10	1	4		14	4	5	4	10	7	3		4	4	9		1		2		87	
24	Velvet-fronted Nuthatch ( <i>Sitta frontalis</i> )	2								3				4										2		11	
22	Green-billed Malkoha ( <i>Phaenicophaeus tristis</i> )	1		1	1	1		1	1	2	3		2	4		3	1	3	3	1		1		2	2	33	
23	Bar-winged Flycatcher-shrike ( <i>Hemipus picatus</i> )	3							6	3		4									2			1		19	
24	White-browed Piculet ( <i>Sasia ochracea</i> )	1																								1	
26	Bronzed Drongo ( <i>Dicrurus aeneus</i> )			12	17	5	3	9	4	13	8		11	2	4	7	8	14	14	12	5	15	3	12	11	189	
28	Red-whiskered Bulbul ( <i>Pycnonotus jocosus</i> )			3		10		10	3	4	2	11	7	9	6	14	2	5	1	7	4	5	5	5	3	116	
29	White-browed Scimitar-Babbler ( <i>Pomatorhinus schisticeps</i> )			1	1	1		1		2	3			6	4	2	1	4	4	2	4	1		2	2	41	
30	Little Spiderhunter ( <i>Arachnothera longirostra</i> )			3	4	4		1	1	3	1	3	1	4	2	3	3	3	2	1		2	1	4	3	49	
31	Grey-headed Flycatcher ( <i>Culicicapa ceylonensis</i> )#					1				1	3	2		2												3	
32	Black-naped Monarch ( <i>Hypothymis azurea</i> )#			6		2		2	2			1						1	2	1	2		2	3	1	6	
33	White-throated Fantail ( <i>Rhipidura albicollis</i> )			4		2			1	3		2	1		1	1		2		4	4		2		2	29	
34	Silver-breasted Broadbill ( <i>Serilophus lunatus</i> )			5																		2			4	11	
35	Great Barbet ( <i>Megaliama virens</i> )			4	1	1				1	2	4	3	4	8	4	1	4	4	4	4	2	1	1	4	3	56
36	Blue-throated Barbet ( <i>Megaliama asiatica</i> )			2	2	1			1	5	3	3	1		8	4	3		3	5	3	7	8	4	7	70	
37	Greater Racket-tailed Drongo ( <i>Dicrurus paradiseus</i> )			1	5	4																				10	
38	Common Iora ( <i>Aegithina tiphia</i> )			3				1		5		2						2	4	2			2		2	23	



No	Species	6-Jul-02		31-Aug-02		28-Sep-02		26-Oct-02		23-n0v-02		21-Dec-02		18-Jan-03		15-Feb-03		15-Mar-03		12-Apr-03		10-May-03		14-Jun-03		Total	
		mo	ev	mo	ev	mo	ev	mo	ev	mo	ev	mo	ev	mo	ev	mo	ev	mo	ev	mo	ev	mo	ev	mo	ev		
		39	Great Iora ( <i>Aegithina lafesnayei</i> )			2						2															2
40	Flavescent Bulbul ( <i>Pycnonotus flavescens</i> )			5	2	1	2	2				2	2	3		2	4				10				1	36	
41	Grey-throated Babbler ( <i>Stachyris nigriceps</i> )#			4		2		6	4	7		12		1	5			6		4	2	2		2	2	12	
42	Shikra ( <i>Accipiter badius</i> )			1														1		1				2		5	
43	Buff-breasted Babbler ( <i>Pellorneum tickelli</i> )#			1				2		2	1					2	3	2	2			2		4	1	4	
44	Ruby-cheeked Sunbird ( <i>Anthreotes singalensis</i> )			1								1		1		2	1									6	
45	Ashy Drongo ( <i>Dicrurus leucophaeus</i> )			1	2	5		1	14	3	6	1	3	6	11	5	5	3	7	6	4	1	4		3	91	
46	Common Tailorbird ( <i>Orthotomus sutorius</i> )		7	2	4	2		2	2	1		3	4	3	2	7	5	12	6	8	4	5	2	13	4	98	
47	Himalayan Swiftlet ( <i>Aerodramus brevirostris</i> )			6				25	46			35		40		20	125									297	
48	Crested Treeswift ( <i>Hemiprocne coronata</i> )			2	1			30	25	15		20		30	26	7	52	2	10	2	4			10	3	2	241
49	Chestnut-headed Bee-eater ( <i>Merops leschenaulti</i> )				2				5									2	4					2		15	
50	Hill Blue Flycatcher ( <i>Cyornis banyumas</i> )#				2				2	1	1	3	3	1		1	1					1	4		2	4	
51	Emerald Dove ( <i>Chalcophaps indica</i> )				2	2				1						1	1				1				3	11	
52	Greater Yellownappe ( <i>Picus flavinucha</i> )				1			1				1					1	2		1	2			1		10	
53	Black-winged Cuckoo-shrike ( <i>Coracina melaschista</i> )				1									2				1				1			2	7	



No	Species	6-Jul-02		31-Aug-02		28-Sep-02		26-Oct-02		23-Nov-02		21-Dec-02		18-Jan-03		15-Feb-03		15-Mar-03		12-Apr-03		10-May-03		14-Jun-03		Total	
		mo	ev	mo	ev	mo	ev	mo	ev	mo	ev	mo	ev	mo	ev	mo	ev	mo	ev	mo	ev	mo	ev	mo	ev		
		72	Sultan Tit ( <i>Melanochlora sultanae</i> )									1															
73	Verditer Flycatcher ( <i>Eumyias thalassina</i> )#											1									2						2
74	Yellow-bellied Flowerpecker ( <i>Dicaeum chrysorrheum</i> )			3	1			2	3	1	1																11
75	Blue-bearded Bee-eater ( <i>Nyctyornis athertoni</i> )									1																	1
76	Plaintive Cuckoo ( <i>Cacomantis merulinus</i> )											1			2							1	1				5
77	White-rumped Shama ( <i>Copsychus malabaricus</i> )											1				1		5	1	2							10
78	Asian Emerald Cuckoo ( <i>Chrysococcyx maculatus</i> )											1															1
79	Drongo Cuckoo ( <i>Surniculus lugubris</i> )											1					2	1			1		1	1			7
80	Chestnut-flanked White-eye ( <i>Zosterops erythropleurus</i> )													2	5												7
81	Black-hooded Oriole ( <i>Oriolus xanthornus</i> )													1							1	2	1				5
82	Black-throated Laughingthrush ( <i>Garrulax chinensis</i> )														3	4		4									11
83	Grey-capped Woodpecker ( <i>Dendrocopos canicapillus</i> )														2			2	4	2							10
84	Green Magpie ( <i>Cissa chinensis</i> )															2				3							5
85	Red-rumped Swallow ( <i>Hirundo daurica</i> )															30		2	6					2			40
86	Common Rosefinch ( <i>Carpodacus erythrinus</i> )																	10									10
87	Asian Barred Owlet ( <i>Glaucidium cuculoides</i> )																					1					1
88	Violet Cuckoo ( <i>Chrysococcyx xanthorhynchus</i> )													1				1						1			3
Total		40	25	104	105	94	21	135	159	247	167	150	138	172	195	229	265	158	166	182	74	110	88	143	118	3285	

Appendix C Total number of birds observed in each day in dry dipterocarp forest.

No	Species	13-Jul-02		10-Aug-02		7-Sep-02		5-Oct-02		2-Nov-02		28-Dec-02		25-Jan-03		22-Feb-03		22-Mar-03		19-Apr-03		17-May-03		28-Jun-03		Total
		mo	ev	mo	ev	mo	ev	mo	ev	mo	ev	mo	ev	mo	ev	mo	ev	mo	ev	mo	ev	mo	ev	mo	ev	
1	Black-naped Monarch ( <i>Hypothymis azurea</i> ) #	3		2	1	5															1		2	2	2	5
2	Scarlet Minivet ( <i>Pericrocotus flammeus</i> )	3		6	1	8		6		1	3		7	2			5	3	4		5	3	2			59
3	Black-hooded Oriole ( <i>Oriolus xanthornus</i> )	4	3																							7
4	Large Cuckoo-shrike ( <i>Coracina macei</i> )	3	1									1														5
5	Blue-winged Leafbird ( <i>Chloropsis cochinchinensis</i> )	8	4							1	2		3	3		4	4			2			2	2		35
6	Bar-winged Flycatcher-shrike ( <i>Hemipus picatus</i> )	4	2											3												9
7	Greater Racket-tailed Drongo ( <i>Dicrurus paradiseus</i> )	5	8	6	4	8	7				1															39
8	Ashy Drongo ( <i>Dicrurus leucophaeus</i> )	1	3	1	6	3	6			2	5	2	3	4	7	8			2	6	5	1	1	2	3	71
9	Dollarbird ( <i>Eurystomus orientalis</i> )	2				2																				4
10	Greater Necklaced Laughingthrush ( <i>Garrulax pectoralis</i> )	6	4																							10
11	Common Iora ( <i>Aegithina tiphia</i> )	2			1	2	6	4	2			6		2		4	4	2	1	4	3					43
12	Common Tailorbird ( <i>Orthotomus sutorius</i> )	5	3			2	4					1		2	2	2	8	2		5	3	1	1	2	2	45
13	Velvet-fronted Nuthatch ( <i>Sitta frontalis</i> )		3		2	5	4		6		4			2		4	6		2	2	6	3	2	2		53
14	Black-crested Bulbul ( <i>Pycnonotus melanicterus</i> )				4	5		4				1		4		4		5						2		29
15	Hair-crested Drongo ( <i>Dicrurus hottentottus</i> )		3																							3
16	Lineated Barbet ( <i>Megaliama lineata</i> )		2	3																	1		2			8

No	Species	13-Jul-02		10-Aug-02		7-Sep-02		5-Oct-02		2-Nov-02		28-Dec-02		25-Jan-03		22-Feb-03		22-Mar-03		19-Apr-03		17-May-03		28-Jun-03		Total
		mo	ev	mo	ev	mo	ev	mo	ev	mo	ev	mo	ev	mo	ev	mo	ev	mo	ev	mo	ev	mo	ev	mo	ev	
17	Grey-headed Flycatcher ( <i>Culicicapa ceylonensis</i> )#		1							2				2												2
18	Greater Yellownappe ( <i>Picus flavinucha</i> )		4									1	2													7
19	Green-billed Malkoha ( <i>Phaenicophaeus tristis</i> )		2								1	1						1	1					1	7	
20	Orange-breasted Trogon ( <i>Harpactes oreskios</i> )		1																							1
21	Golden-fronted Leafbird ( <i>Chloropsis aurifrons</i> )	5	3			4	6													2						20
22	Common Wood-shrike ( <i>Tephrodornis pondicerianus</i> )		6																					2		8
23	Black Drongo ( <i>Dicrurus macrocercus</i> )	2	4	3	5																					14
24	Sooty-headed Bulbul ( <i>Pycnonotus aurigaster</i> )				1			2		2		5				2		3	1	2	1	4		3		26
25	Blue-throated Barbet ( <i>Megaliama asiatica</i> )			1												1		2	1	2				1		8
26	Red-whiskered Bulbul ( <i>Pycnonotus jocosus</i> )			7				4				2						2						2		17
27	Flavescent Bulbul ( <i>Pycnonotus flavescens</i> )			2		2						2	2			1		7		4						20
28	Long-tailed Minivet ( <i>Pericrocotus ethologus</i> )				2																					2
29	Great Tit ( <i>Parus major</i> )				2	4	3	2	4	1	1	6	1	3		6	6	1		4	2	1	3		2	52
30	Grey-capped Woodpecker ( <i>Dendrocopos canicapillus</i> )				1	2	1		2		2	2		1		2	2		1	2	2		2			22
31	Crested Treeswift ( <i>Hemiprocne coronata</i> )				2	6	12	16	18	11			5	1	6	7		18	7	8	3	2			2	124
32	Slender-billed Oriole ( <i>Oriolus tenuirostris</i> )											1														1
33	Great Barbet ( <i>Megaliama virens</i> )					1			3				2		2	2	1	1	1							13

All rights reserved

No	Species	13-Jul-02		10-Aug-02		7-Sep-02		5-Oct-02		2-Nov-02		28-Dec-02		25-Jan-03		22-Feb-03		22-Mar-03		19-Apr-03		17-May-03		28-Jun-03		Total
		mo	ev	mo	ev	mo	ev	mo	ev	mo	ev	mo	ev	mo	ev	mo	ev	mo	ev	mo	ev	mo	ev	mo	ev	
		34	Blue-bearded Bee-eater ( <i>Nyctyornis athertoni</i> )					1														1	2	1		
35	Rufescent Prinia ( <i>Prinia rufescens</i> )					5	8	5	4		6		2	4	6	6	6	3	8	4	1	2		2	2	74
36	Puff-throated Babbler ( <i>Pellorneum ruficeps</i> )											1										1			2	4
37	Eurasian Jay ( <i>Garrulus glandarius</i> )					3						3														6
38	Rufous-fronted Babbler ( <i>Stachyris rufifrons</i> )#					2	3				2	2		5	2	3	5	2	6	6			6	5	5	6
39	White-browed Scimitar-Babbler ( <i>Pomatorhinus schisticeps</i> )							2	2				1	3	2	2	2	2	1	3			1	2		23
40	Inornate Warbler ( <i>Phylloscopus inornatus</i> )							3	3	4	5	9	4	8	2	7	5	6	5							61
41	Olive-backed Pipit ( <i>Anthus hodgsoni</i> )							3	6	3				8		4			1							25
42	Bronzed Drongo ( <i>Dicrurus aeneus</i> )					4	7	20	15	1		3	2	1	10	9	5		2	6	2	2	2	2	6	99
43	Plain Flowerpecker ( <i>Dicaeum concolor</i> )							1	2								1									4
44	Striped Tit-Babbler ( <i>Macronous gularis</i> )#							2	7			3	3	4		5	10		2	2						10
45	Red-rumped Swallow ( <i>Hirundo daurica</i> )									8		4	2	30	10		52	55	18	6						185
46	Grey-eyed Bulbul ( <i>Iole propinqua</i> )									2		2		2		4	2	1	1		2	5		2	1	24
47	Red-throated Flycatcher ( <i>Ficedula parva</i> )#									1		1	1	1	2	2	2	1								2
48	Blue Rock-Thrush ( <i>Monticola solitarius</i> )										2	1	1		1	1			1							7
49	Himalayan Swiftlet ( <i>Aerodramus brevirostris</i> )										7	30	3		2		14									56
50	Red-throated Pipit ( <i>Anthus cervinus</i> )										1															1

	Species	13-Jul-02		10-Aug-02		7-Sep-02		5-Oct-02		2-Nov-02		28-Dec-02		25-Jan-03		22-Feb-03		22-Mar-03		19-Apr-03		17-May-03		28-Jun-03		Total
		mo	ev	mo	ev	mo	ev	mo	ev	mo	ev	mo	ev	mo	ev	mo	ev	mo	ev	mo	ev	mo	ev	mo	ev	
51	Rosy Minivet ( <i>Pericrocotus roseus</i> )										2						2									4
52	Oriental White-eye ( <i>Zosterops palpebrosus</i> )										2		1	13	3		2	2	3	2	4		5	2	6	45
53	Eastern Crowned Warbler ( <i>Phylloscopus coronatus</i> )										3						3	2								8
54	Speckled Piculet ( <i>Picumnus innominatus</i> )										1															1
55	Rufous-winged Buzzard ( <i>Butastur liventer</i> )										1				1											2
56	White-browed Shrike-Babbler ( <i>Pteruthius flaviscapis</i> )											4			2	2			1				3		1	13
57	White-browed Piculet ( <i>Sasia ochracea</i> )												1	1												2
58	Buff-breasted Babbler ( <i>Pellorneum tickelli</i> )#												1													1
59	Brown-cheeked Fulvetta ( <i>Alcippe poioicephala</i> )												6	5						10						21
60	Hill Blue Flycatcher ( <i>Cyornis banyumas</i> )#												1										1	2		2
61	Ruby-cheeked Sunbird ( <i>Anthreptes singalensis</i> )														5											5
62	Asian Barred Owlet ( <i>Glaucidium cuculoides</i> )														1						1	1				3
63	Plaintive Cuckoo ( <i>Cacomantis merulinus</i> )														3											3
64	Small Minivet ( <i>Pericrocotus cinnamomeus</i> )														3		2		3	8	2	1	4	4		27
65	Chestnut-bellied Nuthatch ( <i>Sitta castanea</i> )														2	1							2			5
66	Crested Serpent-Eagle ( <i>Spilornis cheela</i> )														1	1	2	1					1		1	7
67	Brown Shrike ( <i>Lanius cristatus</i> )														1	1										2



	Species	13-Jul-02		10-Aug-02		7-Sep-02		5-Oct-02		2-Nov-02		28-Dec-02		25-Jan-03		22-Feb-03		22-Mar-03		19-Apr-03		17-May-03		28-Jun-03		Total
		mo	ev	mo	ev	mo	ev	mo	ev	mo	ev	mo	ev	mo	ev	mo	ev	mo	ev	mo	ev	mo	ev	mo	ev	
68	Chestnut-headed Bee-eater ( <i>Merops leschenaulti</i> )															8	6	9	13	4	5	4	12			61
69	Ashy Bulbul ( <i>Hemixos flavala</i> )																	2								2
70	White-throated Kingfisher ( <i>Halcyon smyrnensis</i> )																	1		2	4	2	2	2		13
71	Asian Brown Flycatcher ( <i>Muscicapa dauurica</i> )#																	2	2			1	1			2
72	Drongo Cuckoo ( <i>Surniculus lugubris</i> )																	1	1							2
73	Mountain Hawk-Eagle ( <i>Spizaetus nipalensis</i> )																	2								2
74	Asian Palm-Swift ( <i>Cypsiurus balasiensis</i> )																		16							16
75	Shikra ( <i>Accipiter badius</i> )																			2	1	2			1	6
76	Grey Treepie ( <i>Dendrocitta formosae</i> )																				3					3
77	White-rumped Shama ( <i>Copsychus malabaricus</i> )																				1					1
Total		53	57	30	32	74	67	64	84	38	49	93	45	139	63	107	148	143	108	95	58	46	57	40	36	1,726



**Appendix D Total number of birds observed in each day in dry evergreen forest.**

No	Species	20-Jul-02		17-Aug-02		14-Sep-02		12-Oct-02		9-Nov-02		7-Dec-02		4-Jan-03		1-Feb-03		1-Mar-03		26-Apr-03		24-May-03		21-Jul-03		Total
		mo	ev	mo	ev	mo	ev	mo	ev	mo	ev	mo	ev	mo	ev	mo	ev	mo	ev	mo	ev	mo	ev	mo	ev	
		1	Great Barbet ( <i>Megaliuma virens</i> )	4	5		2		2	4	2	2	1	1	3	3	2	3	4	4	4	1	3	1	2	
2	Hill Blue Flycatcher ( <i>Cyornis banyumas</i> )#	3	1									2		2	3	2	1		1	1	1	3	1	1	1	3
3	Sooty-headed Bulbul ( <i>Pycnonotus aurigaster</i> )	7	3	7	1							5	1			2		2		4						32
4	Ashy Drongo ( <i>Dicrurus leucophaeus</i> )	5	5	3	2	2	5	1	5	5	4		1	1	3	2	5	1	2	6	10	2	5		5	80
5	Bronzed Drongo ( <i>Dicrurus aeneus</i> )	2	8	5	5	1	4		3	9	8	2	7	2	11	1	7		6	1	4	9	9	4	2	110
6	Rufescent Prinia ( <i>Prinia rufescens</i> )		2	8			2	5				7		6		6				2		5				43
7	Grey-headed Flycatcher ( <i>Culicicapa ceylonensis</i> )#	2						4	4	1	1		1	2	1	2							2	3		4
8	Rufous-fronted Babbler ( <i>Stachyris rufifrons</i> )#	3	8		1				7		6			5	2	2					5	2	4	4	2	8
9	Streaked Spiderhunter ( <i>Arachnothera magna</i> )	2	2			3		2		1	3	2	3					1	1			2		1		23
10	Black-crested Bulbul ( <i>Pycnonotus melanicterus</i> )	4	2		2	1				3	8			3					1	3			2	2		31
11	Scarlet Minivet ( <i>Pericrocotus flammeus</i> )	2	1	3	4		3	5	5	6		7	3	3		6	2	2		7		10	8	2	2	81
12	Puff-throated Babbler ( <i>Pellorneum ruficeps</i> )	1							2					2			1	1		1	1	2	1	1	1	14
13	Green Magpie ( <i>Cissa chinensis</i> )	2																								2
14	Lesser Racket-tailed Drongo ( <i>Dicrurus remifer</i> )	1	1			2								1												5
15	White-throated Fantail ( <i>Rhipidura albicollis</i> )	2				2		2	1				2		1		1			1			2	1		15
16	Black-throated Sunbird ( <i>Aethopyga saturata</i> )	1						2		2			2			1			3					3		14

No	Species	20-Jul-02		17-Aug-02		14-Sep-02		12-Oct-02		9-Nov-02		7-Dec-02		4-Jan-03		1-Feb-03		1-Mar-03		26-Apr-03		24-May-03		21-Jul-03		Total
		mo	ev	mo	ev	mo	ev	mo	ev	mo	ev	mo	ev	mo	ev	mo	ev	mo	ev	mo	ev	mo	ev	mo	ev	
		17	Grey-cheeked Fulvetta ( <i>Alcippe morrisonia</i> )	4	6						8	4				11	5	4	5							
18	White-browed Shrike-Babbler ( <i>Pteruthius flaviscapis</i> )	2	4	4	1	2	2	3	4	3	2		2	7	5	2	6	4	4	6	6	9	2	5		85
19	Grey Treepie ( <i>Dendrocitta formosae</i> )	1	6		2	3	11	2	3	2	5		5	2	5	2	4	3			2	2	6			66
20	Blue-winged Leafbird ( <i>Chloropsis cochinchinensis</i> )	2	8				4			4	2		2	2		4	1		3		3	2	2		6	45
21	Greater Yellownappe ( <i>Picus flavinucha</i> )	1	4			2	3		1		2			2					1	1	3	1	6	2		29
22	Greater Racket-tailed Drongo ( <i>Dicrurus paradiseus</i> )	1	1	1	3	1	1	2	5	4	1	1	6	2		2	8		4		5			3		51
23	Blue-throated Barbet ( <i>Megaliama asiatica</i> )	3	3	2	1		2		1		3			1		3	3	1	4	3	2	1	2			35
24	Blue-eared Barbet ( <i>Megaliama australis</i> )	1																								1
25	Flavescent Bulbul ( <i>Pycnonotus flavescens</i> )	1		2		1										4		2			6		2			18
26	Green-billed Malkoha ( <i>Phaenicophaeus tristis</i> )	1	1	2	2	1	5		1	1	1									1		2	2	1		21
27	Grey-headed Woodpecker ( <i>Picus canus</i> )	1																								1
28	Eurasian Jay ( <i>Garrulus glandarius</i> )		6	4	5	7	2		7	6	11	4	1		7	2	4	1			2	2				71
29	Blue-bearded Bee-eater ( <i>Nyctormis athertoni</i> )		1				1			1	2				1		1				1	2				10
30	Brown-cheeked Fulvetta ( <i>Alcippe poioicephala</i> )	(	4										7	6								4		2		23
31	Grey-eyed Bulbul ( <i>Iole propinqua</i> )		8			1	1			9	4	3	6	1	3	3	2	4	2	1		4	4	2	2	60
32	Grey-capped Woodpecker ( <i>Dendrocopos canicapillus</i> )		7	3	8	1	1			2	3					1			1	5	3	7	1	1		44
33	Hoopoe ( <i>Upupa epops</i> )		4				1			1		2		1	1	2										12

All rights reserved

No	Species	20-Jul-02		17-Aug-02		14-Sep-02		12-Oct-02		9-Nov-02		7-Dec-02		4-Jan-03		1-Feb-03		1-Mar-03		26-Apr-03		24-May-03		21-Jul-03		Total	
		mo	ev	mo	ev	mo	ev	mo	ev	mo	ev	mo	ev	mo	ev	mo	ev	mo	ev	mo	ev	mo	ev	mo	ev		
		34	Ruby-cheeked Sunbird ( <i>Anthreutes singalensis</i> )		2																						
35	Velvet-fronted Nuthatch ( <i>Sitta frontalis</i> )		4	2	2	10	2		9	4	6		9	6	5	2			6	6	6	4	2	3	2	90	
36	Black-naped Monarch ( <i>Hypothymis azurea</i> )#		3			7	1			3				2			2		1	1		5	1	2		7	
37	Large Cuckoo-shrike ( <i>Coracina macei</i> )		2		2		4						1							1				1		11	
38	Common Iora ( <i>Aegithina tiphia</i> )		2	5	7	2		2	2	4	2	2	2	3	3									5		41	
39	Black-throated Laughingthrush ( <i>Garrulax chinensis</i> )		2																							2	
40	Bar-winged Flycatcher-shrike ( <i>Hemipus picatus</i> )		4	10	5		7	7	5	6	13	5		6		5			4	6				3		2	88
41	Ashy Bulbul ( <i>Hypsipetes flavala</i> )		4																			1	2	8		15	
42	Maroon Oriole ( <i>Oriolus traillii</i> )		1			1								1	2			1		1	2		5		2	16	
43	Black Bulbul ( <i>Hypsipetes madagascariensis</i> )																				2	2				4	
44	Himalayan Swiftlet ( <i>Aerodramus brevirostris</i> )		15		10		5				20		50	2	6				6		2					116	
45	Red-rumped Swallow ( <i>Hirundo daurica</i> )		5																							5	
46	Forest Wagtail ( <i>Dendronanthus indicus</i> )				1	1																				2	
47	White-browed Scimitar-Babbler ( <i>Pomatorhinus schisticeps</i> )				1	1		1	1		3	3	3		6		2	2	2		4				3	33	
48	White-crowned Forktail ( <i>Enicurus leschenaulti</i> )				1																					1	
49	Silver-breasted Broadbill ( <i>Serilophus lunatus</i> )					6			3																	9	
50	Mountain Bulbul ( <i>Hypsipetes mccllellandii</i> )						2				2															4	

No	Species	20-Jul-02		17-Aug-02		14-Sep-02		12-Oct-02		9-Nov-02		7-Dec-02		4-Jan-03		1-Feb-03		1-Mar-03		26-Apr-03		24-May-03		21-Jul-03		Total	
		mo	ev	mo	ev	mo	ev	mo	ev	mo	ev	mo	ev	mo	ev	mo	ev	mo	ev	mo	ev	mo	ev	mo	ev		
		51	Plain Flowerpecker ( <i>Dicaeum concolor</i> )					7				1	1							2		2			1		1
52	Hill Prinia ( <i>Prinia atrogularis</i> )	2				2			2		1										4						11
53	Inornate Warbler ( <i>Phylloscopus inornatus</i> )					3	2	3	4	4	8	11	10	10	5	10	4	2	3								79
54	White-bellied Yuhina ( <i>Yuhina zantholeuca</i> )					5				2	2			2													11
55	Black-naped Oriole ( <i>Oriolus chinensis</i> )															1											1
56	Red Junglefowl ( <i>Gallus gallus</i> )					1											1			3			2		1		8
57	Red-throated Flycatcher ( <i>Ficedula parva</i> )#					1			1	2	5		1	1	2	2	2		1								5
58	Lesser Yellownappe ( <i>Picus chlorolophus Vieillot</i> )		1				2		1		2													6	2		14
59	Olive-backed Pipit ( <i>Anthus hodgsoni</i> )							14	10	7	6	7	4	2		3	5										58
60	Slender-billed Oriole ( <i>Oriolus tenuirostris</i> )							1	4												1						6
61	Grey Bushchat ( <i>Saxicola ferrea</i> )								1				2			2	2										7
62	Ashy Minivet ( <i>Pericrocotus divaricatus</i> )								2				3	6							2	3				2	18
63	Striped Tit-Babbler ( <i>Macronous gularis</i> )#								3			3											2		6		14
64	Verditer Flycatcher ( <i>Eumyias thalassina</i> )#								1					2													2
65	Black-winged Cuckoo-shrike ( <i>Coracina melaschista</i> )								1							2				2	1			4			10
66	Great Tit ( <i>Parus major</i> )								4	3	4	1		2	1				1		1						17
67	Red-whiskered Bulbul ( <i>Pycnonotus jocosus</i> )										2																2

No	Species	20-Jul-02		17-Aug-02		14-Sep-02		12-Oct-02		9-Nov-02		7-Dec-02		4-Jan-03		1-Feb-03		1-Mar-03		26-Apr-03		24-May-03		21-Jul-03		Total
		mo	ev	mo	ev	mo	ev	mo	ev	mo	ev	mo	ev	mo	ev	mo	ev	mo	ev	mo	ev	mo	ev	mo	ev	
		68	Oriental White-eye ( <i>Zosterops palpebrosus</i> )									7	7		4			2	2			8	3	4	4	
69	Speckled Piculet ( <i>Picumnus innominatus</i> )									1		1		1	2								3	2	1	11
70	Chestnut-bellied Rock-Thrush ( <i>Monticola rufiventris</i> )											3				2										5
71	Collared Falconet ( <i>Microhierax caerulescens</i> )											1														1
72	Blyth's Leaf-Warbler ( <i>Phylloscopus reguloides</i> )													11	2		2							4	2	21
73	Large Wood-shrike ( <i>Tephrodornis virgatus</i> )													4				4	2	1						11
74	Large-billed Crow ( <i>Corvus macrorhynchos</i> )													3												3
75	Greater Necklaced Laughingthrush ( <i>Garrulax pectoralis</i> )													5												5
76	Eyebrowed Thrush ( <i>Turdus obscurus</i> )													1												1
77	Asian Emerald Cuckoo ( <i>Chrysococcyx maculatus</i> )														1											1
78	Rosy Minivet ( <i>Pericrocotus roseus</i> )														3											3
79	Emerald Dove ( <i>Chalcophaps indica</i> )														1											1
80	Asian Barred Owlet ( <i>Glaucidium cuculoides</i> )																1									1
81	White-browed Piculet ( <i>Sasia ochracea Hodgson</i> )																1									1
82	Chestnut-headed Bee-eater ( <i>Merops leschenaulti</i> )																	2	2	2		2	9			17
83	Red Turtle-Dove ( <i>Streptopelia tranquebarica</i> )																			1						1
84	Asian Paradise-flycatcher ( <i>Terpsiphone paradisi</i> )																				1		2			3

No	Species	20-Jul-02		17-Aug-02		14-Sep-02		12-Oct-02		9-Nov-02		7-Dec-02		4-Jan-03		1-Feb-03		1-Mar-03		26-Apr-03		24-May-03		21-Jul-03		Total
		mo	ev	mo	ev	mo	ev	mo	ev	mo	ev	mo	ev	mo	ev	mo	ev	mo	ev	mo	ev	mo	ev	mo	ev	
		85	Buff-breasted Babbler ( <i>Pellorneum tickelli</i> )#																						1	
86	Crested Serpent-Eagle ( <i>Spilornis cheela</i> )																						1			
87	Crested Treeswift ( <i>Hemiprocne coronata</i> )																				3	2				5
88	Mountain Hawk-Eagle ( <i>Spizaetus nipalensis</i> )																						1			1
Total		61	146	64	73	69	76	56	116	111	152	71	138	146	80	90	77	37	65	91	83	100	104	82	35	2,123

ลิขสิทธิ์มหาวิทยาลัยเชียงใหม่  
 Copyright © by Chiang Mai University  
 All rights reserved

**Appendix E The binary data of birds observed in riparian forest along Mae Ngae Gully for one year.**

No	Species	27-Jul-02	24-Aug-02	21-Sep-02	19-Oct-02	16-Nov-02	14-Dec-02	11-Jan-03	8-Feb-03	8-Mar-03	5-Apr-03	3-May-03	7-Jun-03	Chance (%)	Status
1	Black Baza ( <i>Avicedae leuphotos</i> )	1	0	0	2	1	1	1	1	1	1	1	1	45.833	MC
2	Greater Coucal ( <i>Centropus sinensis</i> )	1	0	0	1	1	1	1	1	1	1	1	1	41.667	MC
3	Lineated Barbet ( <i>Megaliama lineata</i> )	2	0	0	1	0	1	0	1	1	1	2	1	41.667	MC
4	Black-crested Bulbul ( <i>Pycnonotus melanicterus</i> )	2	0	0	2	2	1	2	1	2	1	2	1	66.667	C
5	Grey-headed Parakeet ( <i>Psittacula finschii</i> )	0	0	0	0	1	2	1	0	1	0	1	0	25	UN
6	Greater Racket-tailed Drongo ( <i>Dicrurus paradiseus</i> )	2	0	0	2	2	1	2	1	2	1	2	2	70.833	C
7	Crested Kingfisher ( <i>Megceryle lugubris</i> )	1	0	0	1	1	1	1	1	1	0	1	1	37.5	UN
8	Blue Whistling Thrush ( <i>Myiophonus caeruleus</i> )	0	0	0	2	0	1	2	0	1	1	1	1	37.5	UN
9	Verditer Flycatcher ( <i>Eumyias thalassina</i> )#	0	0	0	0	0	2	1	0	2	0	0	0	20.833	R
10	Red-whiskered Bulbul ( <i>Pycnonotus jocosus</i> )	1	0	0	2	1	2	2	1	1	2	2	2	66.667	C
11	Crested Treeswift ( <i>Hemiprocne coronata</i> )	0	0	0	2	2	1	1	2	1	2	2	2	62.5	C
12	Common Myna ( <i>Acridotheres tristis</i> )	1	0	0	1	0	1	1	1	1	0	1	1	33.333	UN
13	Hill Myna ( <i>Gracula religiosa</i> )	1	0	0	0	2	0	1	1	1	1	1	1	37.5	UN
15	Shikra ( <i>Accipiter badius</i> )	1	0	0	1	0	1	1	0	1	1	1	1	33.333	UN
16	Slaty-backed Forktail ( <i>Enicurus schistaceus</i> )	1	0	0	1	0	1	1	0	1	0	1	1	29.167	UN
17	White-breasted Waterhen ( <i>Amaurornis phoenicurus</i> )	1	0	0	0	1	1	0	0	0	1	0	0	16.667	R
18	Common Sandpiper ( <i>Actitis hypoleucos</i> )	0	0	0	0	0	1	1	2	1	0	0	0	20.833	R

All rights reserved

	Species	27-Jul-02	24-Aug-02	21-Sep-02	19-Oct-02	16-Nov-02	14-Dec-02	11-Jan-03	8-Feb-03	8-Mar-03	5-Apr-03	3-May-03	7-Jun-03	Chance (%)	Status
19	Thick-billed Pigeon ( <i>Treron curvirostra</i> )	1	0	0	1	1	1	1	0	1	1	0	2	37.5	UN
20	Blue-eared Kingfisher ( <i>Alcedo meninting</i> )	0	0	0	0	0	1	0	0	1	0	1	1	16.667	R
21	Asian Emerald Cuckoo ( <i>Chrysococcyx maculatus</i> )	0	0	0	0	0	0	0	0	0	1	0	0	4.1667	R
22	Crested Serpent-Eagle ( <i>Spilornis cheela</i> )	1	0	0	0	1	1	1	1	1	1	0	1	33.333	UN
23	Black Drongo ( <i>Dicrurus macrocercus</i> )	2	0	0	2	1	1	1	2	2	1	1	1	58.333	MC
24	Dusky Warbler ( <i>Phylloscopus fuscatus</i> )	0	0	0	0	0	1	1	2	1	0	0	0	20.833	R
25	Besra ( <i>Accipiter virgatus</i> )	0	0	0	0	0	0	0	0	1	2	1	0	16.667	R
26	Black-backed Forktail ( <i>Enicurus immaculatus</i> )	1	0	0	0	0	0	0	0	0	1	2	0	16.667	R
27	Small Pratincole ( <i>Glareola lactea</i> )	0	0	0	0	0	0	0	0	1	1	1	0	12.5	R
28	House Swift ( <i>Apus affinis</i> )	1	0	0	2	1	1	0	0	1	2	1	0	37.5	UN
29	Ashy Drongo ( <i>Dicrurus leucophaeus</i> )	2	0	0	2	2	1	2	1	2	2	2	2	75	C
30	Yellow-footed Pigeon ( <i>Treron phoenicoptera</i> )	1	0	0	2	1	0	2	0	1	1	1	2	45.833	MC
31	Velvet-fronted Nuthatch ( <i>Sitta frontalis</i> )	0	0	0	1	0	1	0	1	0	0	0	1	16.667	R
32	Common Tailorbird ( <i>Orthotomus sutorius</i> )	2	0	0	2	1	2	0	2	1	2	1	2	62.5	C
33	Indian Roller ( <i>Coracioides benghalensis</i> )	1	0	0	2	1	2	2	0	2	0	1	1	50	MC
34	Black-headed Bulbul ( <i>Pycnonotus atriceps</i> )	1	0	0	0	1	1	1	0	1	1	0	1	29.167	UN



	Species	27-Jul-02	24-Aug-02	21-Sep-02	19-Oct-02	16-Nov-02	14-Dec-02	11-Jan-03	8-Feb-03	8-Mar-03	5-Apr-03	3-May-03	7-Jun-03	Chance (%)	Status
35	Black-hooded Oriole ( <i>Oriolus xanthornus</i> )	1	0	0	0	1	1	0	1	0	0	1	0	20.833	R
36	White-vented Myna ( <i>Acridotheres cinereus</i> )	0	0	0	1	0	1	0	1	1	1	0	1	25	UN
37	Grey-headed Flycatcher ( <i>Culicicapa ceylonensis</i> )#	1	0	0	2	2	0	2	1	2	1	0	1	50	MC
38	White-throated Kingfisher ( <i>Halcyon smyrnensis</i> )	1	0	0	2	1	2	1	1	0	1	1	1	45.833	MC
39	Scarlet Minivet ( <i>Pericrocotus flammeus</i> )	2	0	0	2	2	2	1	2	2	2	2	1	75	C
40	White-rumped Falcon ( <i>Polihierax insignis</i> )	0	0	0	1	1	1	2	0	0	1	1	1	33.333	UN
41	Chestnut-headed Bee-eater ( <i>Merops leschenaulti</i> )	2	0	0	2	2	1	1	2	1	1	2	1	62.5	c
42	Bay Owl ( <i>Phodilus badius</i> )	0	0	0	0	0	0	0	0	0	1	0	0	4.1667	VR
43	Black Kite ( <i>Milvus migrans</i> )	0	0	0	0	0	1	1	1	0	0	0	0	12.5	R
44	Chinese Pond-Heron ( <i>Ardeola bacchus</i> )	1	1	0	0	0	2	1	2	1	1	0	0	37.5	UN
45	Golden-fronted Leafbird ( <i>Chloropsis aurifrons</i> )	2	0	0	2	2	1	2	2	0	2	1	1	62.5	C
46	Grey-headed Lapwing ( <i>Vanellus cinereus</i> )	0	0	0	0	2	2	2	0	0	0	0	0	25	UN
47	Dark-necked Tailorbird ( <i>Orthotomus atrogularis</i> )	1	0	0	2	1	2	2	1	2	2	1	1	62.5	C
48	Dollarbird ( <i>Eurystomus orientalis</i> )	0	0	0	0	0	1	0	1	1	1	0	0	16.667	R
49	Grey Wagtail ( <i>Motacilla cinerea</i> )	0	0	0	0	2	1	1	1	1	0	0	0	25	UN
50	Plaintive Cuckoo ( <i>Cacomantis merulinus</i> )	0	0	0	0	1	1	0	1	0	0	0	0	12.5	R
51	Striped Tit-Babbler ( <i>Macronous gularis</i> )#	1	0	0	1	0	1	1	0	0	1	1	1	29.167	UN

	Species	27-Jul-02	24-Aug-02	21-Sep-02	19-Oct-02	16-Nov-02	14-Dec-02	11-Jan-03	8-Feb-03	8-Mar-03	5-Apr-03	3-May-03	7-Jun-03	Chance (%)	Status
52	Hair-crested Drongo ( <i>Dicrurus hottentottus</i> )	0	0	0	1	1	1	1	0	1	1	1	1	33.333	UN
53	Little Egret ( <i>Egretta garzetta</i> )	0	0	0	0	0	2	1	1	1	0	0	0	20.833	R
54	Asian Palm-Swift ( <i>Cypsiurus balasiensis</i> )	0	0	0	0	0	0	0	1	1	0	0	0	8.3333	VR
55	Blue-throated Barbet ( <i>Megalium asiatica</i> )	1	0	0	1	1	2	1	1	1	1	1	1	45.833	MC
56	Long-tailed Shrike ( <i>Lanius schach</i> )	0	0	0	1	0	1	1	0	1	2	1	0	29.167	UN
57	Sooty-headed Bulbul ( <i>Pycnonotus aurigaster</i> )	2	0	0	2	2	2	2	2	1	2	1	2	75	C
58	Brown Shrike ( <i>Lanius cristatus</i> )	0	0	0	0	0	0	1	2	0	0	0	0	12.5	R
59	Ashy Minivet ( <i>Pericrocotus divaricatus</i> )	0	0	0	1	0	1	2	0	0	1	0	1	25	UN
60	Forest Wagtail ( <i>Dendronanthus indicus</i> )	0	0	0	1	0	2	2	1	0	0	0	0	25	UN
61	Great Egret ( <i>Casmerodius albus</i> )	0	0	0	0	1	1	2	1	1	0	0	0	25	UN
62	Red-wattled Lapwing ( <i>Vanellus indicus</i> )	0	0	0	2	2	1	1	1	0	0	1	0	33.333	UN
63	White Wagtail ( <i>Motacilla alba</i> )	0	0	0	0	1	2	1	2	1	0	0	0	29.167	UN
64	Brown Noddy ( <i>Hirundapus giganteus</i> )	0	0	0	0	1	0	1	0	1	0	1	0	16.667	R
65	Black-shouldered Kite ( <i>Elanus caeruleus</i> )	1	0	0	1	1	1	0	1	0	1	1	1	33.333	UN
66	White-crested Laughingthrush ( <i>Garrulax leucolophus</i> )	0	0	0	0	1	2	0	1	1	2	0	1	33.333	UN

Note: VR=very rare (1-10%)

R=rare (11-20%)

UN=uncommon (21-40%)

MC=moderately common (41-60%)

C=common (61-80%)

VC=very common (90-100%)

(Status categories are in accordance with Khobkhet (1999))

0 = no record

1 = either morning or afternoon record 2 = both morning and afternoon records

Chance(%)=Total sum of binary divided by total number of period effort multiplied by hundred (%)

No	Species	6-Jul-02	31-Aug-02	28-Sep-02	26-Oct-02	23-Nov-02	21-Dec-02	18-Jan-03	15-Feb-03	15-Mar-03	12-Apr-03	10-May-03	14-Jun-03	Chance (%)	Status
19	Scarlet Minivet ( <i>Pericrocotus flammeus</i> )	1	2	1	1	1	1	2	2	2	2	2	1	75	C
20	Grey-eyed Bulbul ( <i>Iole propinqua</i> )	1	1	2	1	2	2	2	1	2	1	1	1	70.833	C
24	Velvet-fronted Nuthatch ( <i>Sitta frontalis</i> )	1	0	0	0	1	0	1	0	0	0	0	1	16.667	R
22	Green-billed Malkoha ( <i>Phaenicophaeus tristis</i> )	1	2	1	2	2	1	1	2	2	1	1	2	75	C
23	Bar-winged Flycatcher-shrike ( <i>Hemipus picatus</i> )	1	0	0	1	1	1	0	0	0	1	1	0	25	UN
24	White-browed Piculet ( <i>Sasia ochracea</i> )	1	0	0	0	0	0	0	0	0	0	0	0	4.1667	VR
26	Bronzed Drongo ( <i>Dicrurus aeneus</i> )	0	2	2	2	2	1	2	2	2	2	2	2	87.5	C
28	Red-whiskered Bulbul ( <i>Pycnonotus jocosus</i> )	0	1	1	2	2	2	2	2	2	2	2	2	83.333	C
29	White-browed Scimitar-Babbler ( <i>Pomatorhinus schisticeps</i> )	0	2	1	1	2	0	2	2	2	2	1	2	70.833	C
30	Little Spiderhunter ( <i>Arachnothera longirostra</i> )	0	2	1	2	2	2	2	2	2	1	2	2	83.333	C
31	Grey-headed Flycatcher ( <i>Culicicapa ceylonensis</i> )#	0	0	1	0	1	2	1	0	0	0	0	0	20.833	R
32	Black-naped Monarch ( <i>Hypothymis azurea</i> )#	0	1	1	1	1	1	0	0	2	2	1	2	50	UN
33	White-throated Fantail ( <i>Rhipidura albicollis</i> )	0	1	1	1	1	2	1	1	1	2	1	1	54.167	UN
34	Silver-breasted Broadbill ( <i>Serilophus lunatus</i> )	0	1	0	0	0	0	0	0	0	0	1	1	12.5	R
35	Great Barbet ( <i>Megaliuma virens</i> )	0	2	1	0	2	2	2	2	2	2	2	2	79.167	C
36	Blue-throated Barbet ( <i>Megaliuma asiatica</i> )	0	2	1	1	2	2	1	2	1	2	2	2	75	C
37	Greater Racket-tailed Drongo ( <i>Dicrurus paradiseus</i> )	0	2	1	0	0	0	0	0	0	0	0	0	12.5	R
38	Common Iora ( <i>Aegithina tiphia</i> )	0	1	0	1	1	1	0	0	2	1	1	1	37.5	UN

No	Species	6-Jul-02	31-Aug-02	28-Sep-02	26-Oct-02	23-Nov-02	21-Dec-02	18-Jan-03	15-Feb-03	15-Mar-03	12-Apr-03	10-May-03	14-Jun-03	Chance (%)	Status
39	Great Iora ( <i>Aegithina lafesnayei</i> )	0	1	0	0	1	0	0	0	0	0	0	1	12.5	R
40	Flavescent Bulbul ( <i>Pycnonotus flavescens</i> )	0	2	2	1	0	2	1	2	0	1	0	1	50	MC
41	Grey-throated Babbler ( <i>Stachyris nigriceps</i> ) #	0	1	1	2	1	1	1	1	1	2	1	2	58.333	MC
42	Shikra ( <i>Accipiter badius</i> )	0	1	0	0	0	0	0	0	1	1	0	1	16.667	R
43	Buff-breasted Babbler ( <i>Pellorneum tickelli</i> ) #	0	1	0	1	1	1	0	2	2	0	1	2	45.833	MC
44	Ruby-cheeked Sunbird ( <i>Anthreutes singalensis</i> )	0	1	0	0	0	1	1	1	1	0	0	0	20.833	R
45	Ashy Drongo ( <i>Dicrurus leucophaeus</i> )	0	2	1	2	2	2	2	2	2	2	2	1	83.333	C
46	Common Tailorbird ( <i>Orthotomus sutorius</i> )	1	2	1	2	1	2	2	2	2	2	2	2	87.5	C
47	Himalayan Swiftlet ( <i>Aerodramus brevirostris</i> )	0	1	0	2	0	1	1	2	0	0	0	0	29.167	UN
48	Crested Treeswift ( <i>Hemiprocne coronata</i> )	0	2	0	2	1	1	2	2	2	2	1	2	70.833	C
49	Chestnut-headed Bee-eater ( <i>Merops leschenaulti</i> )	0	1	0	1	0	0	0	0	2	0	1	0	20.833	R
50	Hill Blue Flycatcher ( <i>Cyornis banyumas</i> )#	0	1	0	1	2	2	1	2	0	0	2	1	50	MC
51	Emerald Dove ( <i>Chalcophaps indica</i> )	0	1	1	0	1	0	1	1	0	1	0	1	29.167	UN
52	Greater Yellownape ( <i>Picus flavinucha</i> Gould)	0	1	0	1	0	1	0	1	1	2	0	1	33.333	UN
53	Black-winged Cuckoo-shrike ( <i>Coracina melaschista</i> )	0	1	0	0	0	0	1	0	1	0	1	1	20.833	R
54	White-browed Shrike-Babbler ( <i>Pteruthius flaviscapis</i> )	0	1	0	0	0	0	0	0	0	0	0	0	4.1667	VR
55	Black-headed Bulbul ( <i>Pycnonotus atriceps</i> )	0	1	1	0	1	0	1	0	0	2	2	0	33.333	UN
56	Brown Shrike ( <i>Lanius cristatus</i> )	0	0	1	2	1	1	0	1	0	0	0	0	25	UN



No	Species	6-Jul-02	31-Aug-02	28-Sep-02	26-Oct-02	23-n0v-02	21-Dec-02	18-Jan-03	15-Feb-03	15-Mar-03	12-Apr-03	10-May-03	14-Jun-03	Chance (%)	Status
75	Blue-bearded Bee-eater ( <i>Nyctyornis athertoni</i> )	0	0	0	0	1	0	0	0	0	0	0	0	4.1667	VR
76	Plaintive Cuckoo ( <i>Cacomantis merulinus</i> )	0	0	0	0	0	1	0	1	0	0	1	1	16.667	R
77	White-rumped Shama ( <i>Copsychus malabaricus</i> )	0	0	0	0	0	1	0	0	1	1	1	0	16.667	R
78	Asian Emerald Cuckoo ( <i>Chrysococcyx maculatus</i> )	0	0	0	0	0	1	0	0	0	0	0	0	4.1667	VR
79	Drongo Cuckoo ( <i>Surniculus lugubris</i> )	0	0	0	0	0	1	0	0	2	0	1	2	25	UN
80	Chestnut-flanked White-eye ( <i>Zosterops erythropleurus</i> )	0	0	0	0	0	0	2	0	0	0	0	0	8.3333	VR
81	Black-hooded Oriole ( <i>Oriolus xanthonus</i> )	0	0	0	0	0	0	1	0	0	1	2	0	16.667	R
82	Black-throated Laughingthrush ( <i>Garrulax chinensis</i> )	0	0	0	0	0	0	1	1	1	0	0	0	12.5	R
83	Grey-capped Woodpecker ( <i>Dendrocopos canicapillus</i> )	0	0	0	0	0	0	1	0	2	1	0	0	16.667	R
84	Green Magpie ( <i>Cissa chinensis</i> )	0	0	0	0	0	0	0	1	0	1	0	0	8.3333	VR
85	Red-rumped Swallow ( <i>Hirundo daurica</i> )	0	0	0	0	0	0	0	1	1	1	0	1	16.667	R
86	Common Rosefinch ( <i>Carpodacus erythrinus</i> )	0	0	0	0	0	0	0	0	1	0	0	0	4.1667	VR
87	Asian Barred Owlet ( <i>Glaucidium cuculoides</i> )	0	0	0	0	0	0	0	0	0	0	1	0	4.1667	VR
88	Red Junglefowl ( <i>Chrysococcyx xanthorhynchus</i> )	0	0	0	0	0	0	1	0	1	0	0	1	12.5	R

Note: VR=very rare (1-10%)

R=rare (11-20%)

UN=uncommon (21-40%)

MC=moderate common (41-60%)

C=common (61-80%)

VC=very common (90-100%)

(Status categories are in accordance with Khobkhet (1999))

0=no record

1=either morning or afternoon record

2=both morning and afternoon records

Chance(%)=Total sum of binary divided by total number of period effort multiplied by hundred (%)



**Appendix F The binary data of birds observed in deciduous forest for one year.**

No	Species	6-Jul-02	31-Aug-02	28-Sep-02	26-Oct-02	23-Nov-02	21-Dec-02	18-Jan-03	15-Feb-03	15-Mar-03	12-Apr-03	10-May-03	14-Jun-03	Chance (%)	Status
1	White-browed Piculet ( <i>Sasia ochracea</i> )	1	0	0	0	1	1	2	0	1	1	0	1	33.333	UN
2	Large-billed Crow ( <i>Corvus macrorhynchos</i> )	0	0	0	0	0	0	1	0	0	0	0	0	4.1667	VR
3	Greater Racket-tailed Drongo ( <i>Dicrurus paradiseus</i> )	2	2	2	1	2	0	1	1	1	1	2	1	66.667	C
4	Black-crested Bulbul ( <i>Pycnonotus melanicterus</i> )	2	2	1	0	2	1	0	2	2	1	2	1	66.667	C
5	White-throated Kingfisher ( <i>Halcyon smyrnensis</i> )	1	0	0	0	0	0	0	0	0	1	2	1	20.833	R
6	Golden-fronted Leafbird ( <i>Chloropsis aurifrons</i> )	2	1	2	1	1	1	1	0	2	2	1	0	58.333	MC
7	Stripe-throated Bulbul ( <i>Pycnonotus finlaysoni</i> )	1	0	0	0	1	0	0	1	0	0	0	0	12.5	R
8	Collared Falconet ( <i>Microhierax caerulescens</i> )	1	0	0	0	0	0	0	0	0	0	0	0	4.1667	VR
9	Rufous-fronted Babbler ( <i>Stachyris rufifrons</i> )#	1	0	0	0	2	2	2	2	1	1	1	2	58.333	MC
10	Yellow-bellied Warbler ( <i>Abracoscopus superciliaris</i> )	2	1	0	1	1	2	1	1	2	2	0	0	54.167	MC
11	Dark-necked Tailorbird ( <i>Orthotomus atrogularis</i> )	1	0	0	0	1	1	1	2	1	2	2	2	54.167	MC
12	Striped Tit-Babbler ( <i>Macronous gularis</i> )#	2	2	1	2	2	2	2	2	2	2	2	2	95.833	VC
13	Sooty-headed Bulbul ( <i>Pycnonotus aurigaster</i> )	1	2	0	2	2	2	2	2	2	1	2	2	83.333	C
14	Brown-cheeked Fulvetta ( <i>Alcippe poioicephala</i> )	1	0	1	1	2	1	1	1	2	2	2	2	66.667	C
15	Blue-winged Leafbird ( <i>Chloropsis cochinchinensis</i> )	1	2	0	2	0	0	2	2	2	2	1	1	62.5	C
16	Streaked Spiderhunter ( <i>Arachnothera magna</i> )	1	2	2	2	1	2	1	1	0	1	1	2	66.667	C
17	Oriental White-eye ( <i>Zosterops palpebrosus</i> )	0	0	0	0	2	2	2	1	2	1	1	2	54.167	UN
18	Red-throated Flycatcher ( <i>Ficedula parva</i> )#	1	0	0	1	2	0	0	0	2	0	0	0	25	UN

Appendix G The binary data of birds observed in dry dipterocarp forest for one year.

No	Species	13-Jul-02	10-Aug-02	7-Sep-02	5-Oct-02	2-Nov-02	28-Dec-02	25-Jan-03	22-Feb-03	22-Mar-03	19-Apr-03	17-May-03	28-Jun-03	Chance (%)	Status
1	Black-naped Monarch ( <i>Hypothymis azurea</i> ) #	1	2	1	0	0	0	0	0	0	1	1	2	33.33	UN
2	Scarlet Minivet ( <i>Pericrocotus flammeus</i> )	1	2	1	1	1	1	2	0	2	1	2	1	62.5	C
3	Black-hooded Oriole ( <i>Oriolus xanthornus</i> )	2	0	0	0	0	0	0	0	0	0	0	0	8.333	VR
4	Large Cuckoo-shrike ( <i>Coracina macei</i> )	2	0	0	0	0	0	0	0	0	0	0	0	8.333	VR
5	Blue-winged Leafbird ( <i>Chloropsis cochinchinensis</i> )	2	0	0	0	2	1	1	2	0	1	1	1	45.83	MC
6	Bar-winged Flycatcher-shrike ( <i>Hemipus picatus</i> )	2	0	0	0	0	0	1	0	0	0	0	0	12.5	R
7	Greater Racket-tailed Drongo ( <i>Dicrurus paradiseus</i> )	2	2	2	0	1	0	0	0	0	0	0	0	29.17	UN
8	Ashy Drongo ( <i>Dicrurus leucophaeus</i> )	2	2	2	0	2	2	2	1	1	2	2	2	83.33	C
9	Dollarbird ( <i>Eurystomus orientalis</i> )	1	0	1	0	0	0	0	0	0	0	0	0	8.333	VR
10	Greater Necklaced Laughingthrush ( <i>Garrulax pectoralis</i> )	2	0	0	0	0	0	0	0	0	0	0	0	8.333	VR
11	Common Iora ( <i>Aegithina tiphia</i> )	1	1	2	2	0	1	1	2	2	2	0	0	58.33	MC
12	Common Tailorbird ( <i>Orthotomus sutorius</i> )	2	0	2	0	0	1	2	2	1	2	2	2	66.67	C
13	Velvet-fronted Nuthatch ( <i>Sitta frontalis</i> )	1	1	2	1	1	0	1	2	1	2	2	1	62.5	C
14	Black-crested Bulbul ( <i>Pycnonotus melanicterus</i> )	0	1	1	1	0	1	1	1	1	0	0	1	33.33	UN
15	Hair-crested Drongo ( <i>Dicrurus hottentottus</i> )	1	0	0	0	0	0	0	0	0	0	0	0	4.167	VR



No	Species	13-Jul-02	10-Aug-02	7-Sep-02	5-Oct-02	2-Nov-02	28-Dec-02	25-Jan-03	22-Feb-03	22-Mar-03	19-Apr-03	17-May-03	28-Jun-03	Chance (%)	Status
16	Lineated Barbet ( <i>Megaliama lineata</i> )	1	1	0	0	0	0	0	0	0	1	1	0	16.67	R
17	Grey-headed Flycatcher ( <i>Culicicapa ceylonensis</i> )#	1	0	0	0	1	0	1	0	0	0	0	0	12.5	R
18	Greater Yellownappe ( <i>Picus flavinucha</i> )	1	0	0	0	0	1	1	0	0	0	0	0	12.5	R
19	Green-billed Malkoha ( <i>Phaenicophaeus tristis</i> )	1	0	0	0	1	1	0	0	0	2	0	1	25	UN
20	Orange-breasted Trogon ( <i>Harpactes oreskios</i> )	1	0	0	0	0	0	0	0	0	0	0	0	4.167	VR
21	Golden-fronted Leafbird ( <i>Chloropsis aurifrons</i> )	2	0	2	0	0	0	0	0	0	1	0	0	20.83	R
22	Common Wood-shrike ( <i>Tephrodornis pondicerianus</i> )	1	0	0	0	0	0	0	0	0	0	0	1	8.333	VR
23	Black Drongo ( <i>Dicrurus macrocercus</i> )	2	2	0	0	0	0	0	0	0	0	0	0	16.67	R
24	Sooty-headed Bulbul ( <i>Pycnonotus aurigaster</i> )	0	1	0	1	1	1	0	1	2	2	1	1	45.83	MC
25	Blue-throated Barbet ( <i>Megaliama asiatica</i> )	0	1	0	0	0	0	0	0	0	0	0	0	4.167	VR
26	Red-whiskered Bulbul ( <i>Pycnonotus jocosus</i> )	0	1	0	1	0	1	0	0	1	0	0	1	20.83	R
27	Flavescent Bulbul ( <i>Pycnonotus flavescens</i> )	0	1	1	0	0	1	1	1	1	1	0	0	29.17	UN
28	Long-tailed Minivet ( <i>Pericrocotus ethologus</i> )	0	1	0	0	0	0	0	0	0	0	0	0	4.167	VR
29	Great Tit ( <i>Parus major</i> )	0	1	2	2	2	2	1	2	1	2	2	1	75	C
30	Grey-capped Woodpecker ( <i>Dendrocopos canicapillus</i> )	0	1	2	1	1	1	1	2	1	2	1	0	54.17	MC
31	Crested Treeswift ( <i>Hemiprocne coronata</i> )	0	1	2	2	1	1	2	1	2	2	1	1	66.67	C
32	Slender-billed Oriole ( <i>Oriolus tenuirostris</i> )	0	0	0	0	0	1	0	0	0	0	0	0	4.167	VR
33	Great Barbet ( <i>Megaliama virens</i> )	0	0	1	1	0	0	1	2	2	1	0	0	33.33	UN

No	Species	13-Jul-02	10-Aug-02	7-Sep-02	5-Oct-02	2-Nov-02	28-Dec-02	25-Jan-03	22-Feb-03	22-Mar-03	19-Apr-03	17-May-03	28-Jun-03	Chance (%)	Status
34	Blue-bearded Bee-eater ( <i>Nyctyornis athertoni</i> )	0	0	1	0	0	0	0	0	0	2	1	0	16.67	R
35	Rufescent Prinia ( <i>Prinia rufescens</i> )	0	0	2	2	1	1	2	2	2	2	1	2	70.83	C
36	Puff-throated Babbler ( <i>Pellorneum ruficeps</i> )	0	0	0	0	0	1	0	0	0	0	1	1	12.5	R
37	Eurasian Jay ( <i>Garrulus glandarius</i> )	0	0	1	0	0	1	0	0	0	0	0	0	8.333	VR
38	Rufous-fronted Babbler ( <i>Stachyris rufifrons</i> ) #	0	0	2	0	1	1	2	2	2	1	1	2	58.33	MC
39	White-browed Scimitar-Babbler ( <i>Pomatorhinus schisticeps</i> )	0	0	0	2	0	1	2	2	2	1	1	1	50	MC
40	Inornate Warbler ( <i>Phylloscopus inornatus</i> )	0	0	0	2	2	2	2	2	2	0	0	0	50	MC
41	Olive-backed Pipit ( <i>Anthus hodgsoni</i> )	0	0	0	2	1	0	1	1	1	0	0	0	25	UN
42	Bronzed Drongo ( <i>Dicrurus aeneus</i> )	0	0	2	2	1	2	2	2	1	2	2	2	75	C
43	Plain Flowerpecker ( <i>Dicaeum concolor</i> )	0	0	0	2	0	0	0	1	0	0	0	0	12.5	R
44	Striped Tit-Babbler ( <i>Macronous gularis</i> ) #	0	0	0	2	0	2	1	2	1	1	0	0	37.5	UN
45	Red-rumped Swallow ( <i>Hirundo daurica</i> )	0	0	0	0	1	2	2	1	2	1	0	0	37.5	UN
46	Grey-eyed Bulbul ( <i>Iole propinqua</i> )	0	0	0	0	1	1	1	2	2	1	1	2	45.83	MC
47	Red-throated Flycatcher ( <i>Ficedula parva</i> ) #	0	0	0	0	1	2	2	2	1	0	0	0	33.33	UN
48	Blue Rock-Thrush ( <i>Monticola solitarius</i> )	0	0	0	0	1	2	1	1	1	0	0	0	25	UN
49	Himalayan Swiftlet ( <i>Aerodramus brevirostris</i> )	0	0	0	0	1	2	1	1	0	0	0	0	20.83	R
50	Red-throated Pipit ( <i>Anthus cervinus</i> )	0	0	0	0	1	0	0	0	0	0	0	0	4.167	VR

	Species	13-Jul-02	10-Aug-02	7-Sep-02	5-Oct-02	2-Nov-02	28-Dec-02	25-Jan-03	22-Feb-03	22-Mar-03	19-Apr-03	17-May-03	28-Jun-03	Chance (%)	Status
51	Rosy Minivet ( <i>Pericrocotus roseus</i> )	0	0	0	0	1	0	0	1	0	0	0	0	8.333	R
52	Oriental White-eye ( <i>Zosterops palpebrosus</i> )	0	0	0	0	1	1	2	1	2	2	1	2	50	MC
53	Eastern Crowned Warbler ( <i>Phylloscopus coronatus</i> )	0	0	0	0	1	0	0	1	1	0	0	0	12.5	R
54	Speckled Piculet ( <i>Picumnus innominatus</i> )	0	0	0	0	1	0	0	0	0	0	0	0	4.167	VR
55	Rufous-winged Buzzard ( <i>Butastur liventer</i> )	0	0	0	0	1	0	1	0	0	0	0	0	8.333	VR
56	White-browed Shrike-Babbler ( <i>Pteruthius flaviscapis</i> )	0	0	0	0	0	1	1	1	1	0	0	0	16.67	R
57	White-browed Piculet ( <i>Sasia ochracea</i> )	0	0	0	0	0	1	1	0	0	0	0	0	8.333	VR
58	Buff-breasted Babbler ( <i>Pellorneum tickelli</i> ) #	0	0	0	0	0	1	0	0	0	0	0	0	4.167	VR
59	Brown-cheeked Fulvetta ( <i>Alcippe poioicephala</i> )	0	0	0	0	0	1	1	0	0	1	0	0	12.5	R
60	Hill Blue Flycatcher ( <i>Cyornis banyumas</i> ) #	0	0	0	0	0	1	1	0	0	0	2	0	16.67	R
61	Ruby-cheeked Sunbird ( <i>Anthreus singalensis</i> )	0	0	0	0	0	0	1	0	0	0	0	0	4.167	VR
62	Asian Barred Owlet ( <i>Glaucidium cuculoides</i> )	0	0	0	0	0	0	1	0	0	1	1	0	12.5	R
63	Plaintive Cuckoo ( <i>Cacomantis merulinus</i> )	0	0	0	0	0	0	1	0	0	0	0	0	4.167	VR
64	Small Minivet ( <i>Pericrocotus cinnamomeus</i> )	0	0	0	0	0	0	1	1	2	2	2	0	33.33	UN
65	Chestnut-bellied Nuthatch ( <i>Sitta castanea</i> )	0	0	0	0	0	0	2	0	0	0	1	0	12.5	R
66	Crested Serpent-Eagle ( <i>Spilornis cheela</i> )	0	0	0	0	0	0	1	2	1	0	1	1	25	UN
67	Brown Shrike ( <i>Lanius cristatus</i> )	0	0	0	0	0	0	1	1	0	0	0	0	8.333	VR
68	Chestnut-headed Bee-eater ( <i>Merops leschenaulti</i> )	0	0	0	0	0	0	0	2	2	2	2	0	33.33	UN

	Species	13-Jul-02	10-Aug-02	7-Sep-02	5-Oct-02	2-Nov-02	28-Dec-02	25-Jan-03	22-Feb-03	22-Mar-03	19-Apr-03	17-May-03	28-Jun-03	Chance (%)	Status
69	Ashy Bulbul ( <i>Hemixos flavala</i> )	0	0	0	0	0	0	0	0	1	0	0	0	4.167	R
70	White-throated Kingfisher ( <i>Halcyon smyrnensis</i> )	0	0	0	0	0	0	0	0	1	2	2	1	25	UN
71	Asian Brown Flycatcher ( <i>Muscicapa dauurica</i> ) #	0	0	0	0	0	0	0	0	2	0	2	0	16.67	R
72	Drongo Cuckoo ( <i>Surniculus lugubris</i> )	0	0	0	0	0	0	0	0	2	0	0	0	8.333	VR
73	Mountain Hawk-Eagle ( <i>Spizaetus nipalensis</i> )	0	0	0	0	0	0	0	0	1	0	0	0	4.167	VR
74	Asian Palm-Swift ( <i>Cypsiurus balasiensis</i> )	0	0	0	0	0	0	0	0	1	0	0	0	4.167	VR
75	Shikra ( <i>Accipiter badius</i> )	0	0	0	0	0	0	0	0	0	1	2	1	16.67	R
76	Grey Treepie ( <i>Dendrocitta formosae</i> )	0	0	0	0	0	0	0	0	0	0	1	0	4.167	VR
77	White-rumped Shama ( <i>Copsychus malabaricus</i> )	0	0	0	0	0	0	0	0	0	0	1	0	4.167	VR

Note: VR=very rare (1-10%)

R=rare (11-20%)

UN=uncommon (21-40%)

MC=moderate common (41-60%)

C=common (61-80%)

VC=very common (90-100%)

(Status categories are in accordance with Khobkhet (1999))

0=no record

1=either morning or afternoon record

2=both morning and afternoon records

Chance(%)=Total sum of binary divided by total number of period effort multiplied by hundred (%)

ลิขสิทธิ์มหาวิทยาลัยเชียงใหม่

Copyright © by Chiang Mai University

All rights reserved

**Appendix H The binary data of birds observed in dry evergreen forest for one year.**

No	Species	20-Jul-02	17-Aug-02	14-Sep-02	12-Oct-02	9-Nov-02	7-Dec-02	4-Jan-03	1-Feb-03	1-Mar-03	26-Apr-03	24-May-03	21-Jul-03	Chance (%)	Status
1	Great Barbet ( <i>Megaliuma virens</i> )	2	1	1	2	2	2	2	2	2	2	2	1	87.5	C
2	Hill Blue Flycatcher ( <i>Cyornis banyumas</i> ) #	2	0	0	0	0	1	2	2	1	2	2	2	58.333	MC
3	Sooty-headed Bulbul ( <i>Pycnonotus aurigaster</i> )	2	2	0	0	0	2	0	1	1	1	0	0	37.5	UN
4	Ashy Drongo ( <i>Dicrurus leucophaeus</i> )	2	2	2	2	2	1	2	2	2	2	2	1	91.667	VC
5	Bronzed Drongo ( <i>Dicrurus aeneus</i> )	2	2	2	1	2	2	2	2	1	2	2	2	91.667	VC
6	Rufescent Prinia ( <i>Prinia rufescens</i> )	1	1	1	1	0	1	1	1	0	1	1	0	37.5	UN
7	Grey-headed Flycatcher ( <i>Culicicapa ceylonensis</i> ) #	1	0	0	2	2	1	2	1	0	0	1	1	45.833	MC
8	Rufous-fronted Babbler ( <i>Stachyris rufifrons</i> ) #	2	1	0	1	1	0	2	1	0	1	2	2	54.167	MC
9	Streaked Spiderhunter ( <i>Arachnothera magna</i> )	2	0	1	1	1	2	1	0	2	0	1	1	50	MC
10	Black-crested Bulbul ( <i>Pycnonotus melanicterus</i> )	2	1	1	0	2	0	1	0	1	1	1	1	45.833	MC
11	Scarlet Minivet ( <i>Pericrocotus flammeus</i> )	2	2	1	2	1	2	1	2	1	1	2	2	79.167	C
12	Puff-throated Babbler ( <i>Pellorneum ruficeps</i> )	1	0	0	1	0	0	1	1	1	2	2	2	45.833	MC
13	Green Magpie ( <i>Cissa chinensis</i> )	1	0	0	0	0	0	0	0	0	0	0	0	4.1667	VR
14	Lesser Racket-tailed Drongo ( <i>Dicrurus remifer</i> )	2	0	1	0	0	0	1	0	0	0	0	0	16.667	R
15	White-throated Fantail ( <i>Rhipidura albicollis</i> )	1	0	1	1	1	0	1	1	1	1	1	1	41.667	MC
16	Black-throated Sunbird ( <i>Aethopyga saturata</i> )	1	0	0	1	1	1	0	1	1	0	0	1	29.167	UN
17	Grey-cheeked Fulvetta ( <i>Alcippe morrisonia</i> )	2	0	0	1	1	1	0	1	1	0	0	1	33.333	UN
18	White-browed Shrike-Babbler ( <i>Pteruthius flaviscapis</i> )	2	2	2	2	2	1	2	2	2	2	2	1	91.667	VC
19	Grey Treepie ( <i>Dendrocitta formosae</i> )	2	1	2	2	2	1	2	2	1	1	2	0	75	C

No	Species	20-Jul-02	17-Aug-02	14-Sep-02	12-Oct-02	9-Nov-02	7-Dec-02	4-Jan-03	1-Feb-03	1-Mar-03	26-Apr-03	24-May-03	21-Jul-03	Chance (%)	Status
20	Blue-winged Leafbird ( <i>Chloropsis cochinchinensis</i> )	2	0	1	0	2	1	1	2	1	1	2	1	58.333	MC
21	Greater Yellownappe ( <i>Picus flavinucha</i> )	2	0	2	1	1	0	1	0	1	2	2	1	54.167	MC
22	Greater Racket-tailed Drongo ( <i>Dicrurus paradiseus</i> )	2	2	2	2	2	2	1	2	1	1	0	1	75	C
23	Blue-throated Barbet ( <i>Megaliama asiatica</i> )	2	2	1	1	1	0	1	2	2	2	2	0	66.667	C
24	Blue-eared Barbet ( <i>Megaliama australis</i> )	1	0	0	0	0	0	0	0	0	0	0	0	4.1667	VR
25	Flavescent Bulbul ( <i>Pycnonotus flavescens</i> )	1	1	1	0	0	0	0	1	1	1	1	0	29.167	UN
26	Green-billed Malkoha ( <i>Phaenicophaeus tristis</i> )	2	2	2	1	2	0	0	0	0	1	2	1	54.167	MC
27	Grey-headed Woodpecker ( <i>Picus canus</i> )	1	0	0	0	0	0	0	0	0	0	0	0	4.1667	VR
28	Eurasian Jay ( <i>Garrulus glandarius</i> )	1	2	2	1	2	2	0	2	1	1	1	0	62.5	C
29	Blue-bearded Bee-eater ( <i>Nyctornis athertoni</i> )	1	0	1	0	2	0	0	1	0	2	0	0	29.167	UN
30	Brown-cheeked Fulvetta ( <i>Alcippe poioicephala</i> )	1	0	0	0	0	1	1	0	0	0	1	1	20.833	R
31	Grey-eyed Bulbul ( <i>Iole propinqua</i> )	1	0	2	0	2	2	2	2	2	1	2	2	75	C
32	Grey-capped Woodpecker ( <i>Dendrocopos canicapillus</i> )	1	2	2	0	2	0	0	1	1	2	2	1	58.333	MC
33	Hoopoe ( <i>Upupa epops</i> )	1	0	1	1	1	1	2	0	0	0	0	0	29.167	UN
34	Ruby-cheeked Sunbird ( <i>Anthreus singalensis</i> )	1	0	0	0	0	0	0	0	0	0	0	0	4.1667	VR
35	Velvet-fronted Nuthatch ( <i>Sitta frontalis</i> )	1	2	2	1	2	1	2	2	1	2	2	2	83.333	C
36	Black-naped Monarch ( <i>Hypothymis azurea</i> )#	1	0	2	0	1	0	1	2	1	1	2	1	50	MC
37	Large Cuckoo-shrike ( <i>Coracina macei</i> )	1	1	1	0	0	1	0	0	0	1	0	1	25	UN
38	Common Iora ( <i>Aegithina tiphia</i> )	1	2	1	2	2	2	2	0	0	0	0	1	54.167	MC

No	Species	20-Jul-02	17-Aug-02	14-Sep-02	12-Oct-02	9-Nov-02	7-Dec-02	4-Jan-03	1-Feb-03	1-Mar-03	26-Apr-03	24-May-03	21-Jul-03	Chance (%)	Status
39	Black-throated Laughingthrush ( <i>Garrulax chinensis</i> )	1	0	0	0	0	0	0	0	0	0	0	0	4.1667	VR
40	Bar-winged Flycatcher-shrike ( <i>Hemipus picatus</i> )	1	2	1	2	1	1	1	1	1	1	1	1	58.333	MC
41	Ashy Bulbul ( <i>Hypsipetes flavala</i> )	1	1	0	0	0	0	0	0	0	0	2	1	20.833	R
42	Maroon Oriole ( <i>Oriolus traillii</i> )	1	0	1	0	0	1	1	0	1	2	1	1	37.5	UN
43	Black Bulbul ( <i>Hypsipetes madagascariensis</i> )	0	0	0	0	0	0	0	0	0	1	1	0	8.3333	VR
44	Himalayan Swiftlet ( <i>Aerodramus brevirostris</i> )	1	1	1	0	1	1	2	0	1	1	0	0	37.5	UN
45	Red-rumped Swallow ( <i>Hirundo daurica</i> )	1	0	0	0	0	0	0	0	0	0	0	0	4.1667	VR
46	Forest Wagtail ( <i>Dendronanthus indicus</i> )	0	2	0	0	0	0	0	0	0	0	0	0	8.3333	VR
47	White-browed Scimitar-Babbler ( <i>Pomatorhinus schisticeps</i> )	0	2	1	1	2	1	1	2	1	1	1	1	58.333	MC
48	White-crowned Forktail ( <i>Enicurus leschenaulti</i> )	0	1	0	0	0	0	0	0	0	0	0	0	4.1667	VR
49	Silver-breasted Broadbill ( <i>Serilophus lunatus</i> )	0	1	0	1	0	0	0	0	0	0	0	0	8.3333	VR
50	Mountain Bulbul ( <i>Hypsipetes mccllellandii</i> )	0	0	1	0	1	0	0	0	0	1	0	0	12.5	R
51	Plain Flowerpecker ( <i>Dicaeum concolor</i> )	0	0	1	0	2	0	0	0	1	1	2	0	29.167	UN
52	Hill Prinia ( <i>Prinia atrogularis</i> )	1	0	1	1	1	0	0	0	0	0	0	0	16.667	R
53	Inornate Warbler ( <i>Phylloscopus inornatus</i> )	0	0	2	2	2	2	2	2	2	0	0	0	58.333	MC
54	White-bellied Yuhina ( <i>Yuhina zantholeuca</i> )	0	0	1	0	2	0	1	0	0	0	0	0	16.667	R
55	Black-naped Oriole ( <i>Oriolus chinensis</i> )	0	0	0	0	0	0	0	1	0	0	0	0	4.1667	VR
56	Red Junglefowl ( <i>Gallus gallus</i> )	0	0	1	0	0	0	0	0	1	1	1	1	20.833	R
57	Red-throated Flycatcher ( <i>Ficedula parva</i> )#	0	0	1	1	2	1	2	2	1	0	0	0	41.667	MC



No	Species	20-Jul-02	17-Aug-02	14-Sep-02	12-Oct-02	9-Nov-02	7-Dec-02	4-Jan-03	1-Feb-03	1-Mar-03	26-Apr-03	24-May-03	21-Jul-03	Chance (%)	Status
58	Lesser Yellownape ( <i>Picus chlorolophus</i> )	1	0	1	1	1	0	0	0	0	0	1	1	25	UN
59	Olive-backed Pipit ( <i>Anthus hodgsoni</i> )	0	0	0	2	2	2	1	0	0	0	0	0	29.167	UN
60	Slender-billed Oriole ( <i>Oriolus tenuirostris</i> )	0	0	0	2	0	0	0	0	0	1	0	0	12.5	R
61	Grey Bushchat ( <i>Saxicola ferrea</i> )	0	0	0	1	0	1	0	2	0	0	0	0	16.667	R
62	Ashy Minivet ( <i>Pericrocotus divaricatus</i> )	0	0	0	1	0	1	1	0	0	2	0	2	29.167	UN
63	Striped Tit-Babbler ( <i>Macronous gularis</i> )#	0	0	0	1	0	1	0	0	0	0	1	1	16.667	R
64	Verditer Flycatcher ( <i>Eumyias thalassina</i> )#	0	0	0	1	0	0	1	0	0	0	0	0	8.3333	VR
65	Black-winged Cuckoo-shrike ( <i>Coracina melaschista</i> )	0	0	0	1	0	0	0	1	0	2	1	0	20.833	R
66	Great Tit ( <i>Parus major</i> )	0	0	0	1	2	1	2	0	1	1	0	0	33.333	UN
67	Red-whiskered Bulbul ( <i>Pycnonotus jocosus</i> )	0	0	0	0	1	0	0	0	0	0	0	0	4.1667	VR
68	Oriental White-eye ( <i>Zosterops palpebrosus</i> )	0	0	0	0	2	1	0	2	0	2	2	1	41.667	MC
69	Speckled Piculet ( <i>Picumnus innominatus</i> )	0	0	0	0	1	1	1	1	0	0	1	2	29.167	UN
70	Chestnut-bellied Rock-Thrush ( <i>Monticola rufiventris</i> )	0	0	0	0	0	1	0	1	0	0	0	0	8.3333	VR
71	Collared Falconet ( <i>Microhierax caerulescens</i> )	0	0	0	0	0	1	0	0	0	0	0	0	4.1667	VR
72	Blyth's Leaf-Warbler ( <i>Phylloscopus reguloides</i> )	0	0	0	0	0	0	2	1	1	0	0	2	25	UN
73	Large Wood-shrike ( <i>Tephrodornis virgatus</i> )	0	0	0	0	0	0	1	0	0	2	0	0	12.5	R
74	Large-billed Crow ( <i>Corvus macrorhynchos</i> )	0	0	0	0	0	0	1	0	0	0	0	0	4.1667	VR
75	Greater Necklaced Laughingthrush ( <i>Garrulax pectoralis</i> )	0	0	0	0	0	0	1	0	0	0	0	0	4.1667	VR



No	Species	20-Jul-02	17-Aug-02	14-Sep-02	12-Oct-02	9-Nov-02	7-Dec-02	4-Jan-03	1-Feb-03	1-Mar-03	26-Apr-03	24-May-03	21-Jul-03	Chance (%)	Status
76	Eyebrowed Thrush ( <i>Turdus obscurus</i> )	0	0	0	0	0	0	1	0	0	0	0	0	4.1667	VR
77	Asian Emerald Cuckoo ( <i>Chrysococcyx maculatus</i> )	0	0	0	0	0	0	1	0	0	0	0	0	4.1667	VR
78	Rosy Minivet ( <i>Pericrocotus roseus</i> )	0	0	0	0	0	0	1	0	0	0	0	0	4.1667	VR
79	Emerald Dove ( <i>Chalcophaps indica</i> )	0	0	0	0	0	0	1	0	0	0	0	0	4.1667	VR
80	Asian Barred Owlet ( <i>Glaucidium cuculoides</i> )	0	0	0	0	0	0	0	1	0	0	0	0	4.1667	VR
81	White-browed Piculet ( <i>Sasia ochracea Hodgson</i> )	0	0	0	0	0	0	0	1	0	0	0	0	4.1667	VR
82	Chestnut-headed Bee-eater ( <i>Merops leschenaulti</i> )	0	0	0	0	0	0	0	0	2	1	2	0	20.833	R
83	Red Turtle-Dove ( <i>Streptopelia tranquebarica</i> )	0	0	0	0	0	0	0	0	0	1	0	0	4.1667	VR
84	Asian Paradise-flycatcher ( <i>Terpsiphone paradisi</i> )	0	0	0	0	0	0	0	0	0	1	1	0	8.3333	VR
85	Buff-breasted Babbler ( <i>Pellorneum tickelli</i> ) #	0	0	0	0	0	0	0	0	0	0	1	0	4.1667	VR
86	Crested Serpent-Eagle ( <i>Spilornis cheela</i> )	0	0	0	0	0	0	0	0	0	0	1	0	4.1667	VR
87	Crested Treeswift ( <i>Hemiprocne coronata</i> )	0	0	0	0	0	0	0	0	0	1	1	0	8.3333	VR
88	Mountain Hawk-Eagle ( <i>Spizaetus nipalensis</i> )	0	0	0	0	0	0	0	0	0	0	1	0	4.1667	VR

Note: VR=very rare (1-10%)

R=rare (11-20%)

UN=uncommon (21-40%)

MC=moderate common (41-60%)

C=common (61-80%)

VC=very common (90-100%)

(Status categories are in accordance with Khobkhet (1999))

0=no record

1=either morning or afternoon record

2=both morning and afternoon records

Chance(%)=Total sum of binary divided by total number of period effort multiplied by hundred (%)

All rights reserved

Appendix I Number of birds in each research area including feeding behaviour, status and feeding space

		GL	DF	DDF	DEF	Feeding	Status	Feeding Space	Total
1	Red Junglefowl ( <i>Gullus gallus</i> )		13		8	O	R	G	21
2	Speckled Piculet ( <i>Picumnus innominatus</i> )		6	1	11	I	R	T	18
3	White-browed Piculet ( <i>Sasia ochracea</i> )		10	2	1	I	R	T	13
4	Grey-capped Woodpecker ( <i>Dendrocopos canicapillus</i> )		10	22	44	I	R	T	76
5	Lesser Yellownape ( <i>Picus chlorolophus</i> )				14	I	R	T	14
6	Greater Yellownape ( <i>Picus flavinucha</i> )		10	7	29	I	R	T	46
7	Grey-headed Woodpecker ( <i>Picus canus</i> )				1	I	R	T	1
8	Great Barbet ( <i>Megaliama virens</i> )		56	13	55	F	R	C	124
9	Lineated Barbet ( <i>Megaliama lineata</i> )	18		8		F	R	C	26
10	Blue-throated Barbet ( <i>Megaliama asiatica</i> )	27	70	8	35	F	R	C	140
11	Blue-eared Barbet ( <i>Megaliama australis</i> )				1	F	R	C	1
12	Hoopoe ( <i>Upupa epops</i> )				12	I	R	G	12
13	Orange-breasted Trogon ( <i>Harpactes oreskios</i> )			1		I	R	C	1
14	Indian Roller ( <i>Coracius benghalensis</i> )	31				I	R	C	31
15	Dollarbird ( <i>Eurystomus orientalis</i> )	6		4		I	R	C	10
16	Blue-eared Kingfisher ( <i>Alcedo meninting</i> )	3				C	R	G	3
17	White-throated Kingfisher ( <i>Halcyon smyrnensis</i> )	21	7	13		C	R	G	41
18	Crested Kingfisher ( <i>Megceryle lugubris</i> )	12				C	R	G	12
19	Blue-bearded Bee-eater ( <i>Nyctyornis athertoni</i> )		1	5	10	I	R	C	16

		GL	DF	DDF	DEF	Feeding	Status	Feeding Space	Total
20	Chestnut-headed Bee-eater ( <i>Merops leschenaulti</i> )	137	15	61	17	I	R	C	230
21	Plaintive Cuckoo ( <i>Cacomantis merulinus</i> )	3	5	3		C	R	C	11
22	Asian Emerald Cuckoo ( <i>Chrysococcyx maculatus</i> )	2	1		1	I	R	C	4
23	Violet Cuckoo ( <i>Chrysococcyx xanthorhynchus</i> )		3			I	R	C	3
24	Drongo Cuckoo ( <i>Surniculus lugubris</i> )		7	2		O	R	C	9
25	Green-billed Malkoha ( <i>Phaenicophaeus tristis</i> )		33	7	21	I	R	C	61
26	Greater Coucal ( <i>Centropus sinensis</i> )	16				C	R	G	16
27	Grey-headed Parakeet ( <i>Psittacula finschii</i> )	5				F	R	C	5
28	Himalayan Swiftlet ( <i>Aerodramus brevirostris</i> )		297	56	116	I	R	O	469
29	Brown Needletail ( <i>Hirundapus giganteus</i> )	39				I	R	O	39
30	Asian Palm-Swift ( <i>Cypsiurus balasiensis</i> )	32		16		I	R	O	48
31	House Swift ( <i>Apus affinis</i> )	211				I	R	O	211
32	Crested Treeswift ( <i>Hemiprocne coronata</i> )	197	241	124	5	I	R	O	575
33	Bay Owl ( <i>Phodilus badius</i> )	1				C	R	C	1
34	Asian Barred Owlet ( <i>Glaucidium cuculoides</i> )		1	3	1	C	R	C	5
35	Red Turtle-Dove ( <i>Streptopelia tranquebarica</i> )				1	G	R	G	1
36	Emerald Dove ( <i>Chalcophaps indica</i> )		11		1	G	R	C	12
37	Thick-billed Pigeon ( <i>Treron curvirostra</i> )	325	164			F	R	C	489
38	Yellow-footed Pigeon ( <i>Treron phoenicoptera</i> )	105				F	R	C	105

		GL	DF	DDF	DEF	Feeding	Status	Feeding Space	Total
39	White-breasted Waterhen ( <i>Amaurornis phoenicurus</i> )	4				O	R	G	4
40	Common Sandpiper ( <i>Anthus hypoleucos</i> )	11				I	N	G	11
41	Grey-headed Lapwing ( <i>Vanellus cinereus</i> )	47				I	N	G	47
42	Red-wattled Lapwing ( <i>Vanellus indicus</i> )	27				I	R	G	27
43	Small Pratincole ( <i>Glareola lactea</i> )	17				I	R	G	17
44	Black Baza ( <i>Avicedae leuphotes</i> )	30				C	R	C	30
45	Black-shouldered Kite ( <i>Elanus caeruleus</i> )	7				C	R	C	7
46	Black Kite ( <i>Milvus migrans</i> )	4				C	M	C	4
47	Crested Serpent-Eagle ( <i>Spilornis cheela</i> )	10	7	7	1	C	R	C	25
48	Shikra ( <i>Accipiter badius</i> )	8	5	6		C	R	C	19
49	Besra ( <i>Accipiter virgatus</i> )	4				C	R	C	4
50	Rufous-winged Buzzard ( <i>Butastur liventer</i> )			2		C	R	C	2
51	Mountain Hawk-Eagle ( <i>Spizaetus nipalensis</i> )			2	1	C	R	C	3
52	White-rumped Falcon ( <i>Polihierax insignis</i> )	17				C	R	C	17
53	Collared Falconet ( <i>Microhierax caerulescens</i> )		1		1	C	R	C	2
54	Little Egret ( <i>Egretta garzetta</i> )	15				C	N	G	15
55	Great Egret ( <i>Casmerodius albus</i> )	25				C	N	G	25
56	Chinese Pond-Heron ( <i>Ardeola bacchus</i> )	35				C	N	G	35
57	Silver-breasted Broadbill ( <i>Serilophus lunatus</i> )		11		9	I	R	C	20

		GL	DF	DDF	DEF	Feeding	Status	Feeding Space	Total
58	Blue-winged Leafbird ( <i>Chloropsis cochinchinensis</i> )		39	35	45	F	R	C	119
59	Golden-fronted Leafbird ( <i>Chloropsis aurifrons</i> )	70	27	20		F	R	C	117
60	Brown Shrike ( <i>Lanius cristatus</i> )	3	6	2		C	N	C	11
61	Long-tailed Shrike ( <i>Lanius schach</i> )	11				C	R	C	11
62	Eurasian Jay ( <i>Garrulus glandarius</i> )			6	71	O	R	C	77
63	Green Magpie ( <i>Cissa chinensis</i> )		5		2	O	R	C	7
64	Grey Treepie ( <i>Dendrocitta formosae</i> )			3	66	O	R	C	69
65	Large-billed Crow ( <i>Corvus macrorhynchos</i> )		5		3	O	R	C	8
66	Black-naped Oriole ( <i>Oriolus chinensis</i> )				1	O	N	C	1
67	Slender-billed Oriole ( <i>Oriolus tenuirostris</i> )			1	6	O	M	C	7
68	Black-hooded Oriole ( <i>Oriolus xanthornus</i> )	26	5	7		O	R	C	38
69	Maroon Oriole ( <i>Oriolus traillii</i> )				16	O	R	C	16
70	Large Cuckoo-shrike ( <i>Coracina macei</i> )			5	11	I	R	C	16
71	Black-winged Cuckoo-shrike ( <i>Coracina melaschista</i> )		7		10	I	R	C	18
72	Rosy Minivet ( <i>Pericrocotus roseus</i> )			4	3	I	M	C	7
73	Ashy Minivet ( <i>Pericrocotus divaricatus</i> )	17			18	I	M	C	35
74	Small Minivet ( <i>Pericrocotus cinnamomeus</i> )			27		I	R	C	27
75	Long-tailed Minivet ( <i>Pericrocotus ethologus</i> )			2		I	R	C	2
76	Scarlet Minivet ( <i>Pericrocotus flammeus</i> )	77	74	59	81	I	R	C	291

		GL	DF	DDF	DEF	Feeding	Status	Feeding Space	Total
77	Bar-winged Flycatcher-shrike ( <i>Hemipus picatus</i> )		19	9	88	I	R	C	116
78	White-throated Fantail ( <i>Rhipidura albicollis</i> )		29		15	I	R	C	44
79	Black Drongo ( <i>Dicrurus macrocercus</i> )	49		14		I	R	C	63
80	Ashy Drongo ( <i>Dicrurus leucophaeus</i> )	88	91	71	80	I	R	C	330
81	Bronzed Drongo ( <i>Dicrurus aeneus</i> )		189	99	110	I	R	C	398
82	Lesser Racket-tailed Drongo ( <i>Dicrurus remifer</i> )				5	I	R	C	5
83	Hair-crested Drongo ( <i>Dicrurus hottentottus</i> )	17		3		N	R	C	20
84	Greater Racket-tailed Drongo ( <i>Dicrurus paradiseus</i> )	66	71	39	51	I	R	C	227
85	Black-naped Monarch ( <i>Hypothymis azurea</i> )		6	5	7	I	R	C	18
86	Asian Paradise-flycatcher ( <i>Terpsiphone paradisi</i> )		9		3	I	R	C	12
87	Common Iora ( <i>Aegithina tiphia</i> )		23	43	41	I	R	C	107
88	Great Iora ( <i>Aegithina lafesnayeri</i> )		6			I	R	C	6
89	Large Wood-shrike ( <i>Tephrodornis virgatus</i> )				11	I	R	C	11
90	Common Wood-shrike ( <i>Tephrodornis pondicerianus</i> )			8		I	R	C	8
91	Chestnut-bellied Rock-Thrush ( <i>Monticola rufiventris</i> )				5	O	M	G	5
92	Blue Rock-Thrush ( <i>Monticola solitarius</i> )			7		O	M	G	7
93	Blue Whistling Thrush ( <i>Myiophonus caeruleus</i> )	15				O	R	G	15
94	Eyebrowed Thrush ( <i>Turdus obscurus</i> )				1	O	M	G	1
95	Asian Brown Flycatcher ( <i>Muscicapa dauurica</i> )			2		I	N	C	2



		GL	DF	DDF	DEF	Feeding	Status	Feeding Space	Total
96	Red-throated Flycatcher ( <i>Ficedula parva</i> )		2	2	5	I	N	C	9
97	Verditer Flycatcher ( <i>Eumyias thalassina</i> )	2	2		2	I	R	C	6
98	Hill Blue Flycatcher ( <i>Cyornis banyumas</i> )		4	2	3	I	R	C	9
99	Grey-headed Flycatcher ( <i>Culicicapa ceylonensis</i> )	4	3	2	4	I	R	C	13
100	White-rumped Shama ( <i>Copsychus malabaricus</i> )		10	1		I	R	C	11
101	Black-backed Forktail ( <i>Enicurus immaculatus</i> )	5				I	R	G	5
102	Slaty-backed Forktail ( <i>Enicurus schistaceus</i> )	12				I	R	G	12
103	White-crowned Forktail ( <i>Enicurus leschenaulti</i> )		6		1	I	R	G	7
104	Grey Bushchat ( <i>Saxicola ferrea</i> )				7	I	M	G	7
105	Common Myna ( <i>Acridotheres tristis</i> )	23				O	R	C	23
106	White-vented Myna ( <i>Acridotheres cinereus</i> )	27				O	R	C	27
107	Hill Myna ( <i>Gracula religiosa</i> )	18				O	R	C	18
108	Chestnut-bellied Nuthatch ( <i>Sitta castanea</i> )			5		I	R	T	5
109	Velvet-fronted Nuthatch ( <i>Sitta frontalis</i> )	10	11	53	90	I	R	T	164
110	Great Tit ( <i>Parus major</i> )			52	17	O	R	C	69
111	Sultan Tit ( <i>Melanochlora sultanae</i> )		1			O	R	C	1
112	Red-rumped Swallow ( <i>Hirundo daurica</i> )		40	185	5	I	R	O	230
113	Black-headed Bulbul ( <i>Pycnonotus atriceps</i> )	33	23			F	R	C	56
114	Black-crested Bulbul ( <i>Pycnonotus melanicterus</i> )	57	90	29	31	F	R	C	202



		GL	DF	DDF	DEF	Feeding	Status	Feeding Space	Total
115	Red-whiskered Bulbul ( <i>Pycnonotus jocosus</i> )	69	116	17	2	F	R	C	204
116	Sooty-headed Bulbul ( <i>Pycnonotus aurigaster</i> )	118	119	26	32	F	R	C	295
117	Stripe-throated Bulbul ( <i>Pycnonotus finlaysoni</i> )		3			F	R	C	3
118	Flavescent Bulbul ( <i>Pycnonotus flavescens</i> )		36	20	18	F	R	C	74
119	Grey-eyed Bulbul ( <i>Iole propinqua</i> )		87	24	60	F	R	C	171
120	Ashy Bulbul ( <i>Hypsipetes flavala</i> )			2	15	F	R	C	17
121	Mountain Bulbul ( <i>Hypsipetes mccllellandii</i> )				4	F	R	C	4
122	Black Bulbul ( <i>Hypsipetes madagascariensis</i> )				4	F	R	C	4
123	Hill Prinia ( <i>Prinia atrogularis</i> )				11	O	R	C	11
124	Rufescent Prinia ( <i>Prinia rufescens</i> )		20	74	43	O	R	C	137
125	Chestnut-flanked White-eye ( <i>Zosterops erythropleurus</i> )		7			O	M	C	7
126	Oriental White-eye ( <i>Zosterops palpebrosus</i> )		61	45	47	O	R	C	153
127	Japanese White-eye ( <i>Zosterops japonicus</i> )		3			O	M	C	3
128	Common Tailorbird ( <i>Orthotomus sutorius</i> )	68	98	45		O	R	C	211
129	Dark-necked Tailorbird ( <i>Orthotomus atrogularis</i> )	39	35			O	R	C	74
130	Dusky Warbler ( <i>Phylloscopus fuscatus</i> )	5				I	N	C	5
131	Inornate Warbler ( <i>Phylloscopus inornatus</i> )		72	61	79	I	N	C	212
132	Eastern Crowned Warbler ( <i>Phylloscopus coronatus</i> )			8		I	M	C	8
133	Blyth's Leaf-Warbler ( <i>Phylloscopus reguloides</i> )				21	I	M	C	21

		GL	DF	DDF	DEF	Feeding	Status	Feeding Space	Total
134	Golden-spectacled Warbler ( <i>Seicercus burkii</i> )		16			I	N	C	16
135	Yellow-bellied Warbler ( <i>Abroscopus superciliaris</i> )		33			I	R	C	33
136	White-crested Laughingthrush ( <i>Garrulax leucolophus</i> )	53	13			O	R	G	66
137	Greater Necklaced Laughingthrush ( <i>Garrulax pectoralis</i> )			10	5	O	R	G	15
138	Black-throated Laughingthrush ( <i>Garrulax chinensis</i> )		11		2	O	R	G	13
139	Buff-breasted Babbler ( <i>Pellorneum tickelli</i> )		4	1	1	I	R	C	6
140	Puff-throated Babbler ( <i>Pellorneum ruficeps</i> )		5	4	14	I	R	G	23
141	White-browed Scimitar-Babbler ( <i>Pomatorhinus schisticeps</i> )		41	23	33	I	R	C	97
142	Rufous-fronted Babbler ( <i>Stachyris rufifrons</i> )		23	6	8	I	R	C	37
143	Grey-throated Babbler ( <i>Stachyris nigriceps</i> )		12			I	R	C	12
144	Striped Tit-Babbler ( <i>Macronous gularis</i> )	6	24	10	14	I	R	C	48
145	White-browed Shrike-Babbler ( <i>Pteruthius flaviscapis</i> )		1	13	85	I	R	T,C	99
146	Brown-cheeked Fulvetta ( <i>Alcippe poioicephala</i> )		68	21	23	I	R	C	112
147	Grey-cheeked Fulvetta ( <i>Alcippe morrisonia</i> )				49	I	R	C	49
148	White-bellied Yuhina ( <i>Yuhina zantholeuca</i> )				11	O	R	C	11
149	Yellow-bellied Flowerpecker ( <i>Dicaeum chrysorrheum</i> )		11			O	R	C	11
150	Plain Flowerpecker ( <i>Dicaeum concolor</i> )		26	4	15	O	R	C	45
151	Ruby-cheeked Sunbird ( <i>Anthreptes singalensis</i> )		6	5	2	F	R	C	13
152	Black-throated Sunbird ( <i>Aethopyga saturata</i> )		37		14	N	R	C	51

		GL	DF	DDF	DEF	Feeding	Status	Feeding Space	Total
153	Little Spiderhunter ( <i>Arachnothera longirostra</i> )		49			N	R	C	49
154	Streaked Spiderhunter ( <i>Arachnothera magna</i> )		33		23	N	R	C	56
155	Forest Wagtail ( <i>Dendronanthus indicus</i> )	6			2	I	N	G	8
156	White Wagtail ( <i>Motacilla alba</i> )	39				I	N	G	39
157	Grey Wagtail ( <i>Motacilla cinerea</i> )	9	7			I	N	G	16
158	Olive-backed Pipit ( <i>Anthus hodgsoni</i> )			25	58	O	M	G	83
159	Red-throated Pipit ( <i>Anthus cervinus</i> )			1		I	M	G	1
160	Common Rosefinch ( <i>Carpodacus erythrinus</i> )		10			G	M	C	10
<b>Territory</b>		<b>2,494</b>	<b>2,875</b>	<b>1,620</b>	<b>2,006</b>				<b>8995</b>
<b>Non-territory</b>		<b>2,697</b>	<b>3,285</b>	<b>1,727</b>	<b>2,123</b>				

F = Frugivorous Birds

**morning** 1,407 1,764 928 978

I = Insectivorous Birds

**afternoon** 1,290 1,521 804 1,145

O = Omnivorous Birds

C = Carnivorous

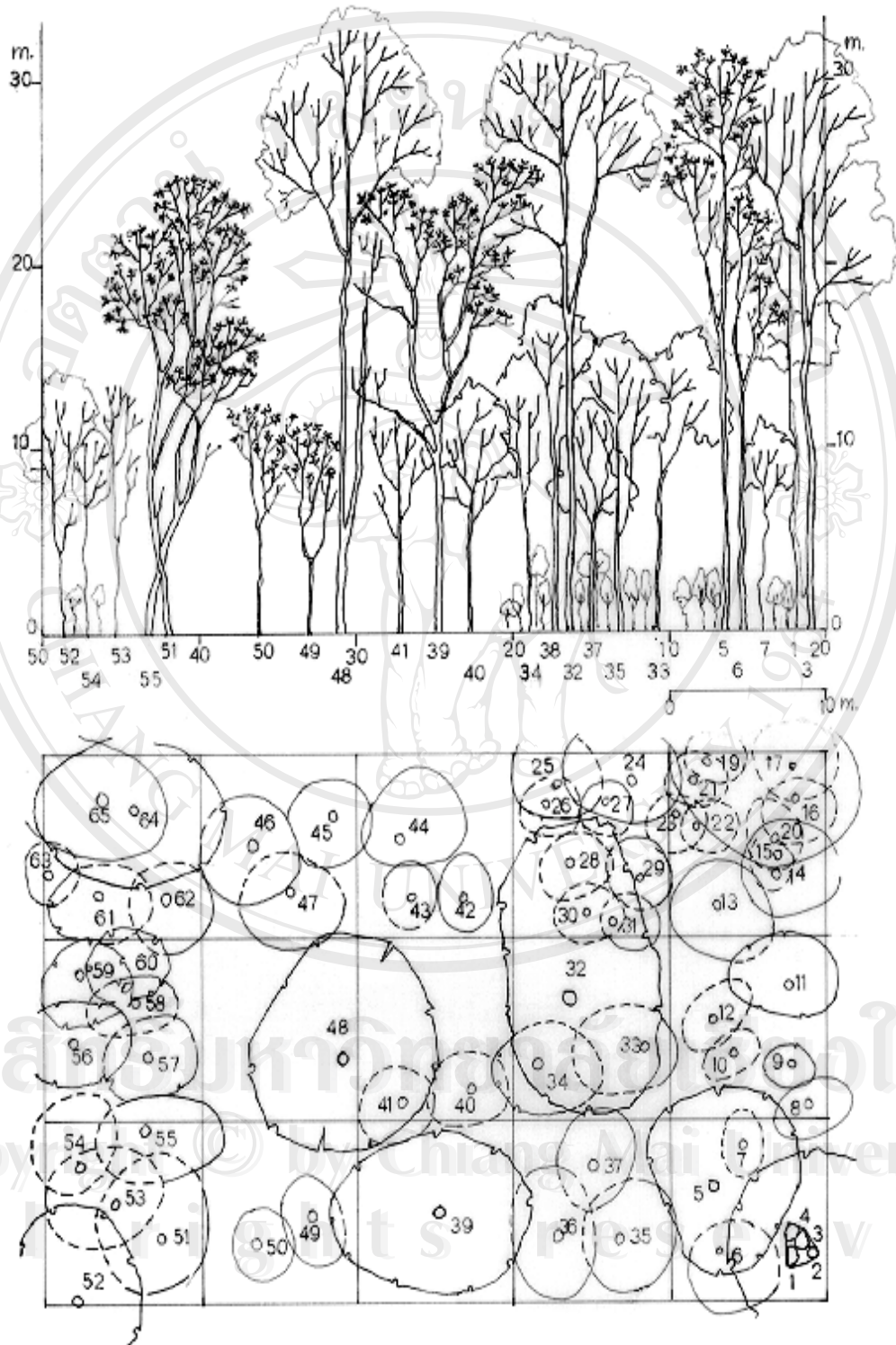
N = Nectarivorous

ลิขสิทธิ์มหาวิทยาลัยเชียงใหม่

Copyright © by Chiang Mai University

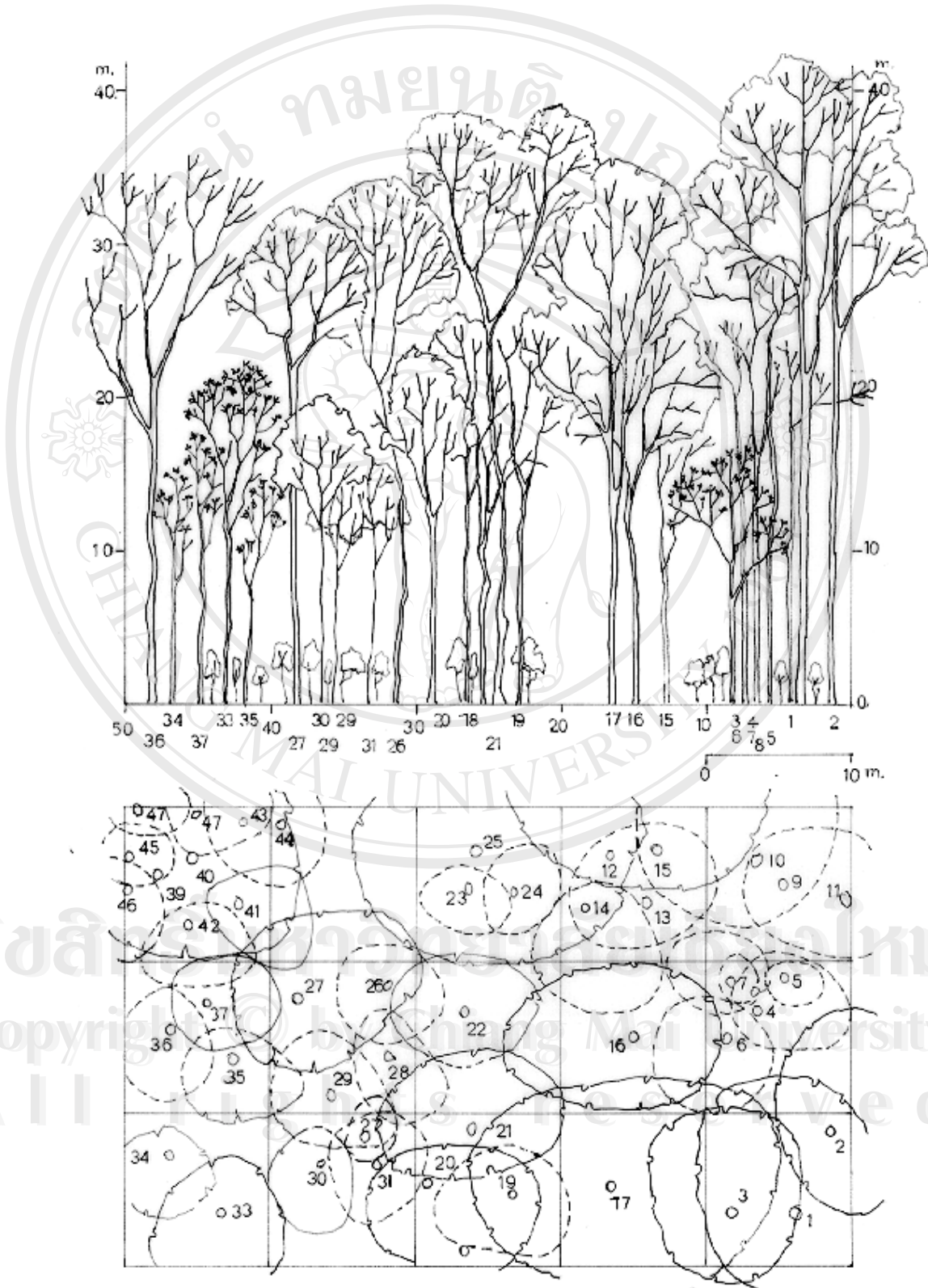
All rights reserved

**Appendix J-1** Vertical and horizontal structures of 1<sup>st</sup> GL plot. Number indicated species number which providing details in CD-R attached in the back page.

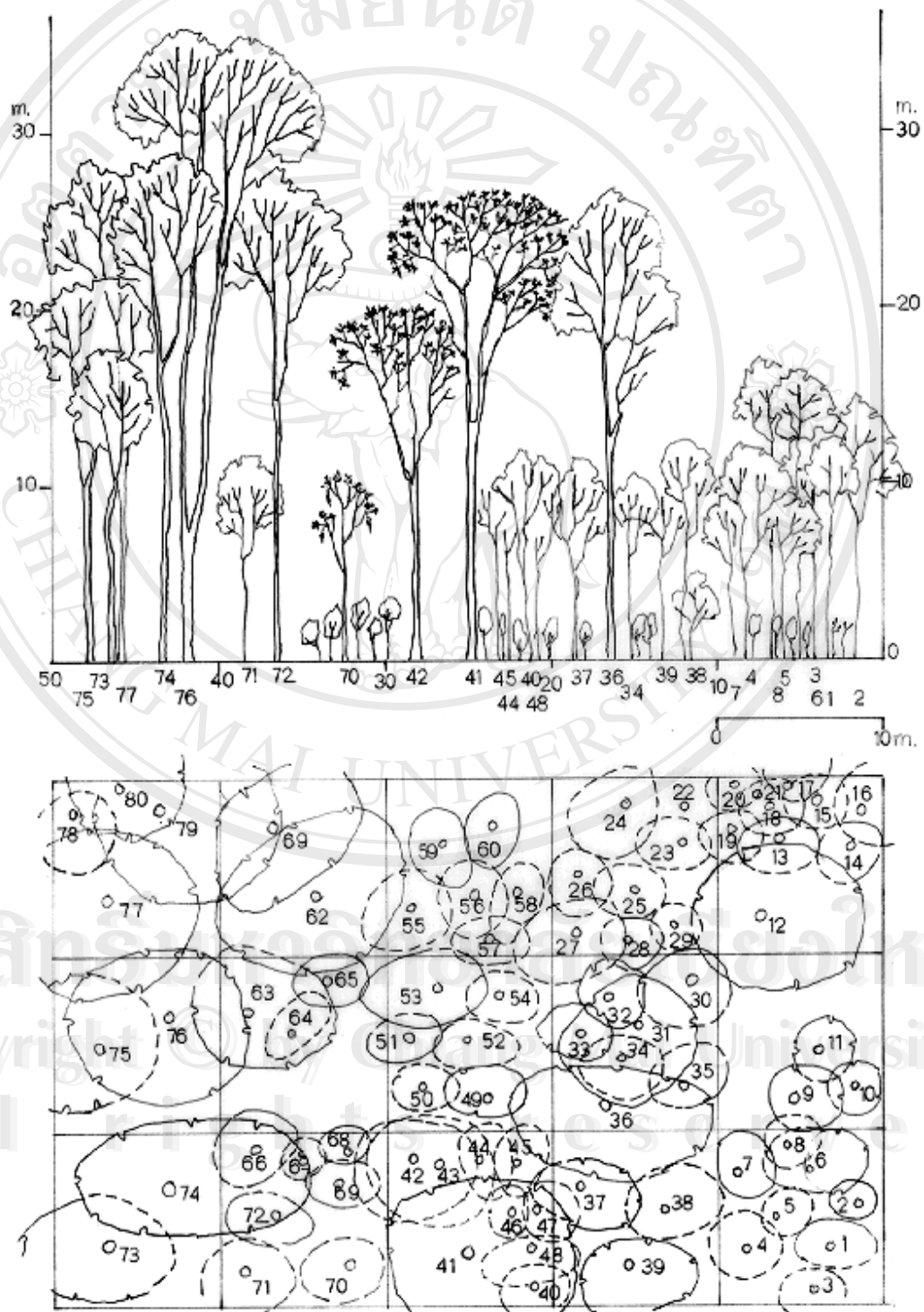




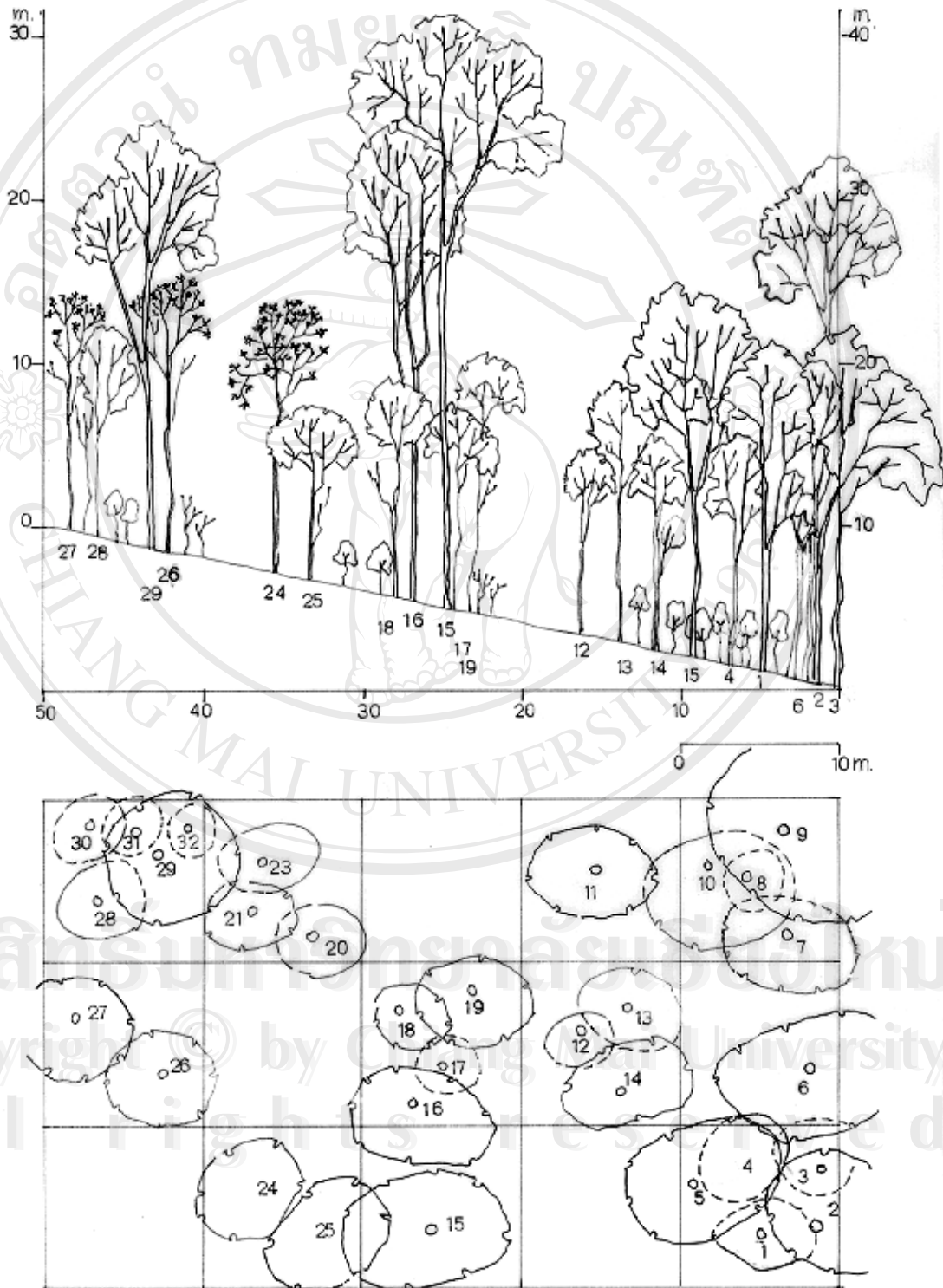
**Appendix J-2** Vertical and horizontal structures of 2<sup>nd</sup> GL plot. Number indicated species number which providing details in CD-R attached in the back page.



**Appendix J-3** Vertical and horizontal structures of 3<sup>rd</sup> GL plot. Number indicated species number which providing details in CD-R attached in the back page.

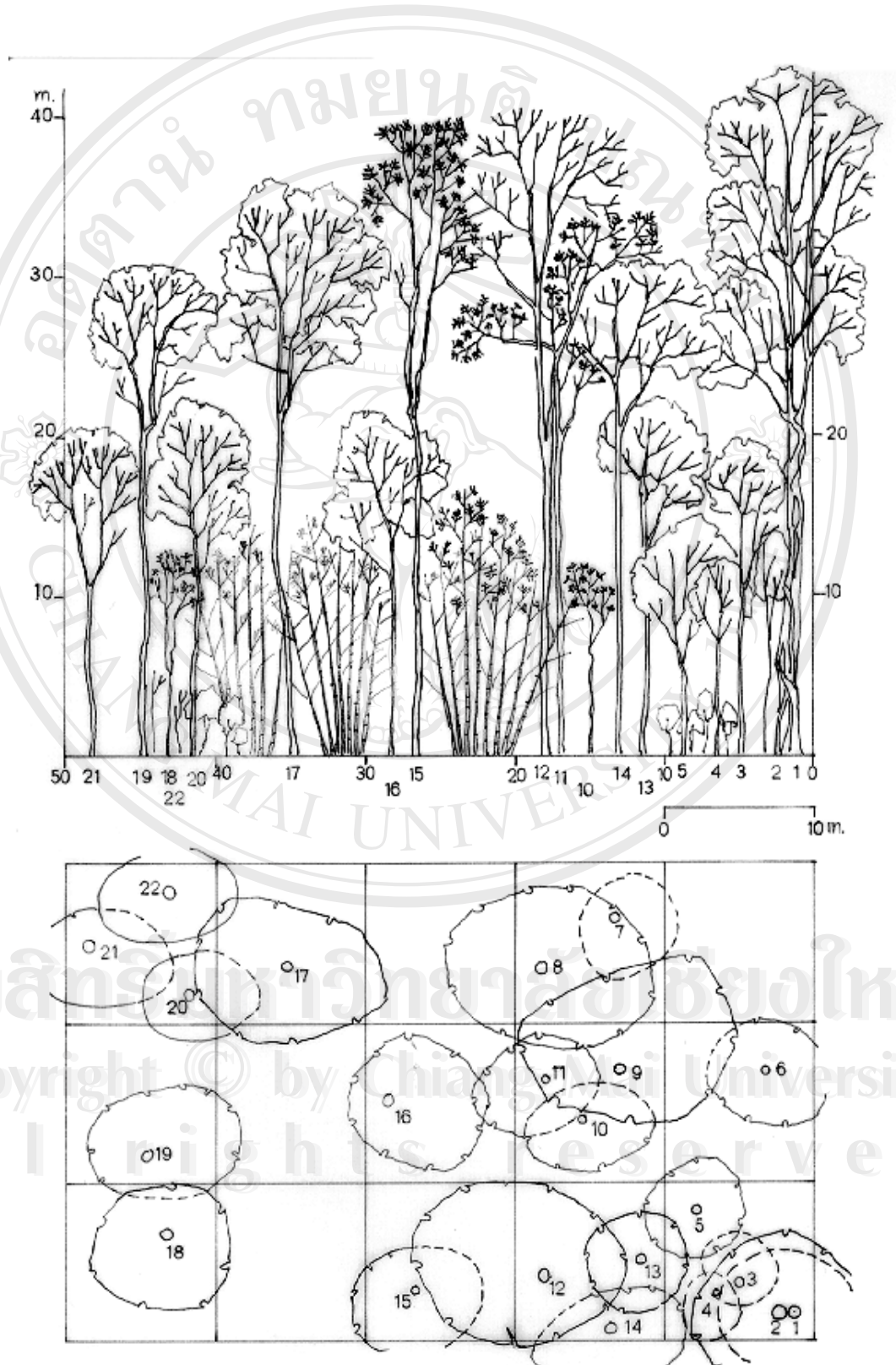


**Appendix J-4** Vertical and horizontal structures of 4<sup>th</sup> GL plot. Number indicated species number which providing details in CD-R attached in the back page.

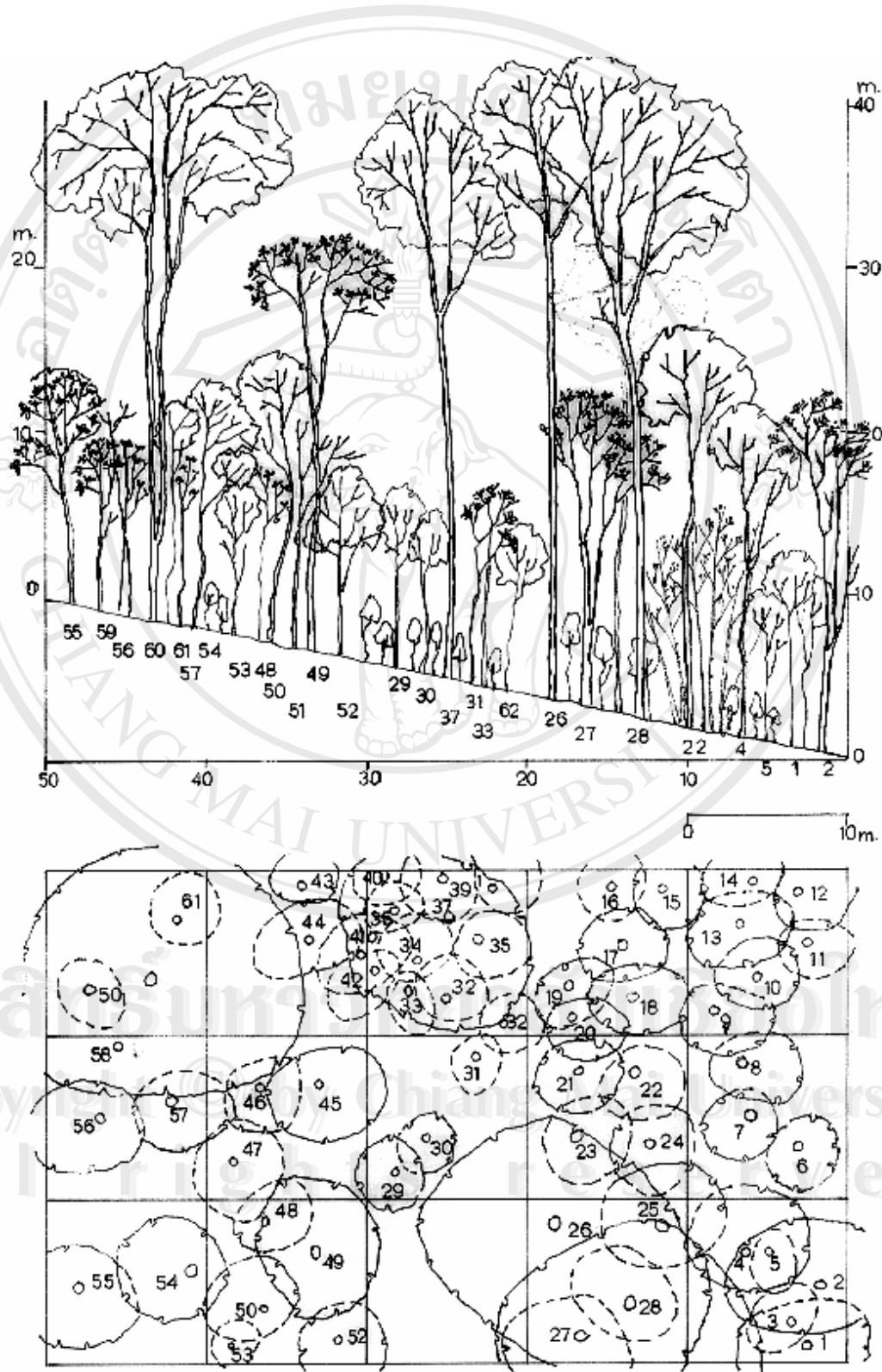




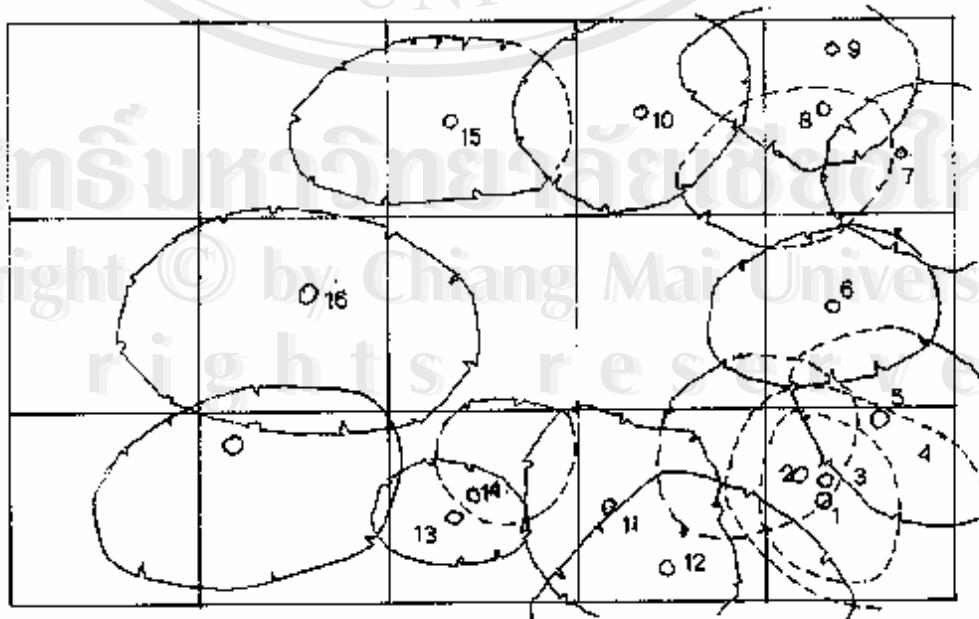
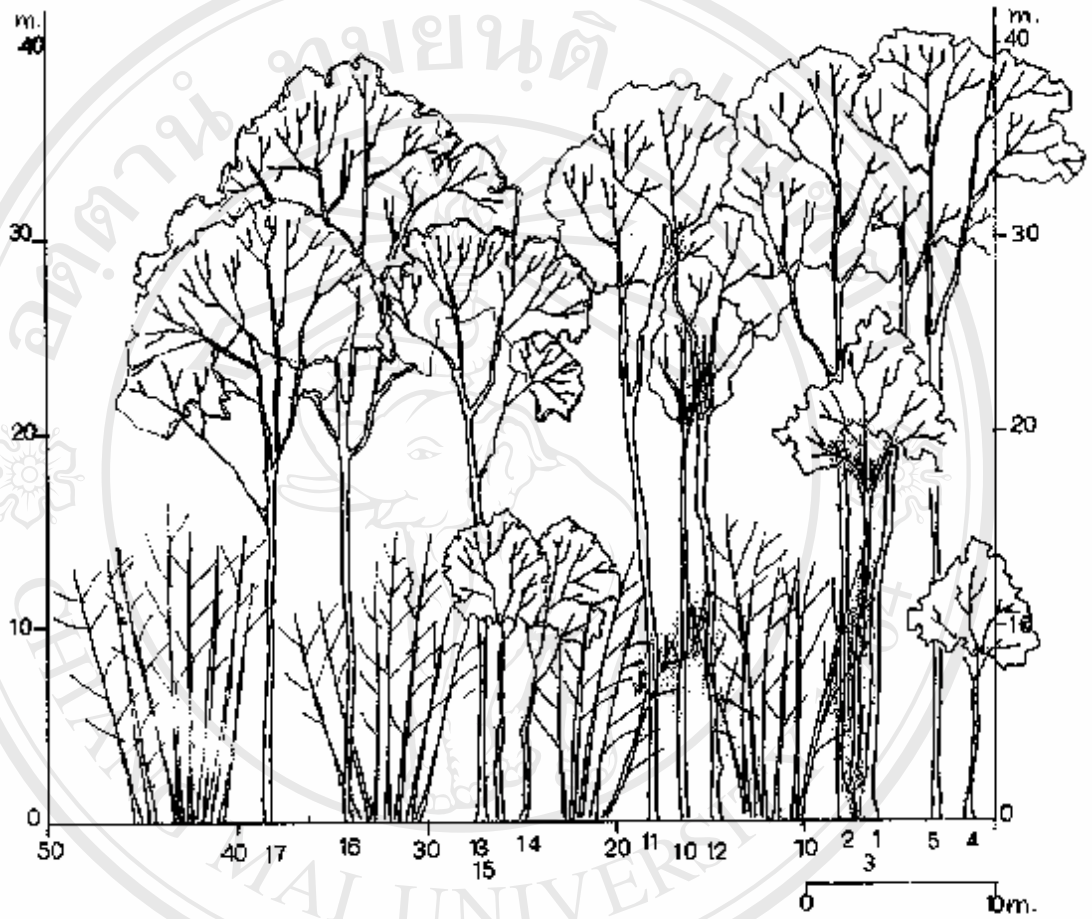
**Appendix J-5** Vertical and horizontal structures of 5<sup>th</sup> GL plot. Number indicated species number which providing details in CD-R attached in the back page.



**Appendix J-6** Vertical and horizontal structures of 6<sup>th</sup> GL plot. Number indicated species number which providing details in CD-R attached in the back page.



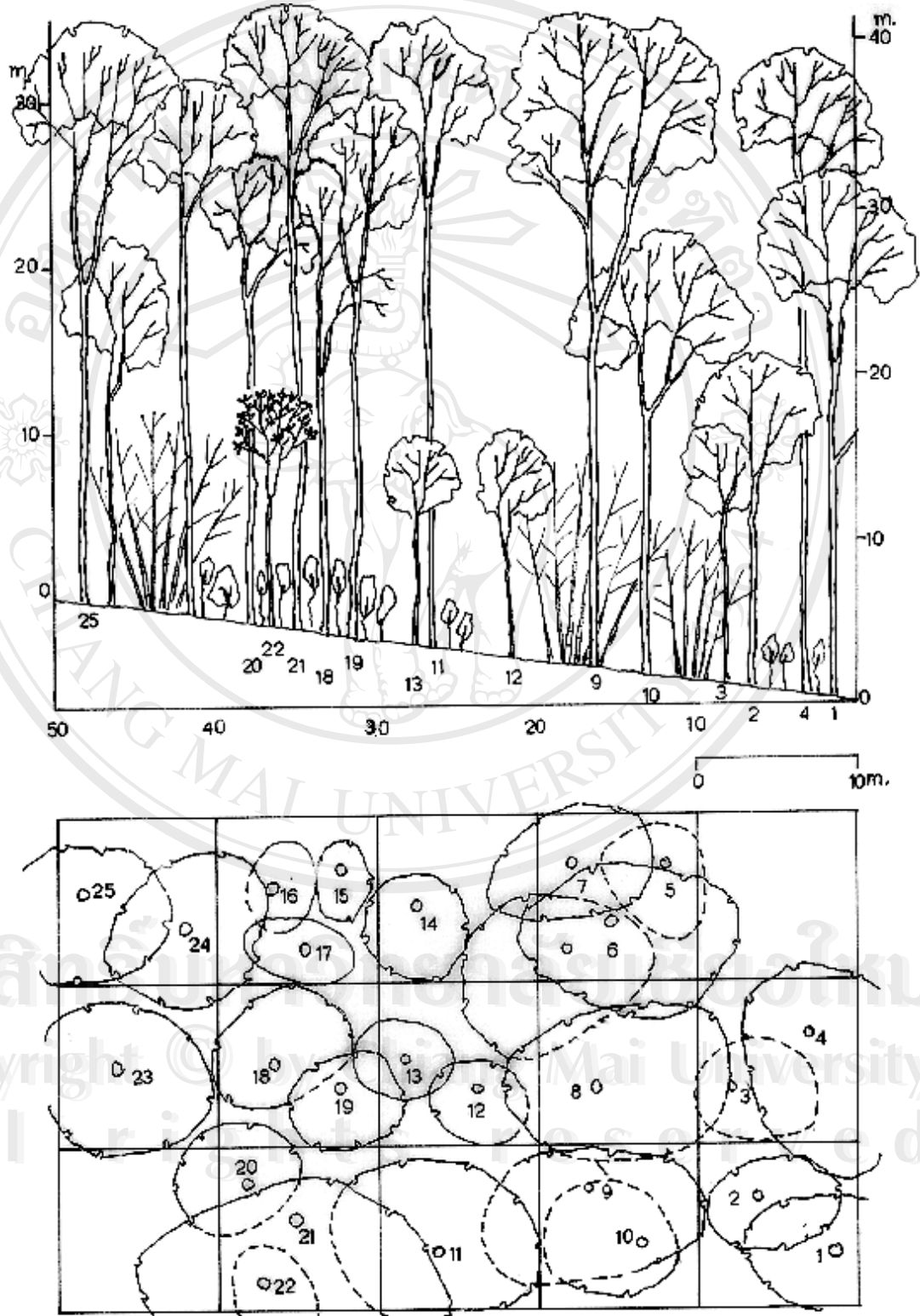
**Appendix J-7** Vertical and horizontal structures of 7<sup>th</sup> GL plot. Number indicated species number which providing details in CD-R attached in the back page.



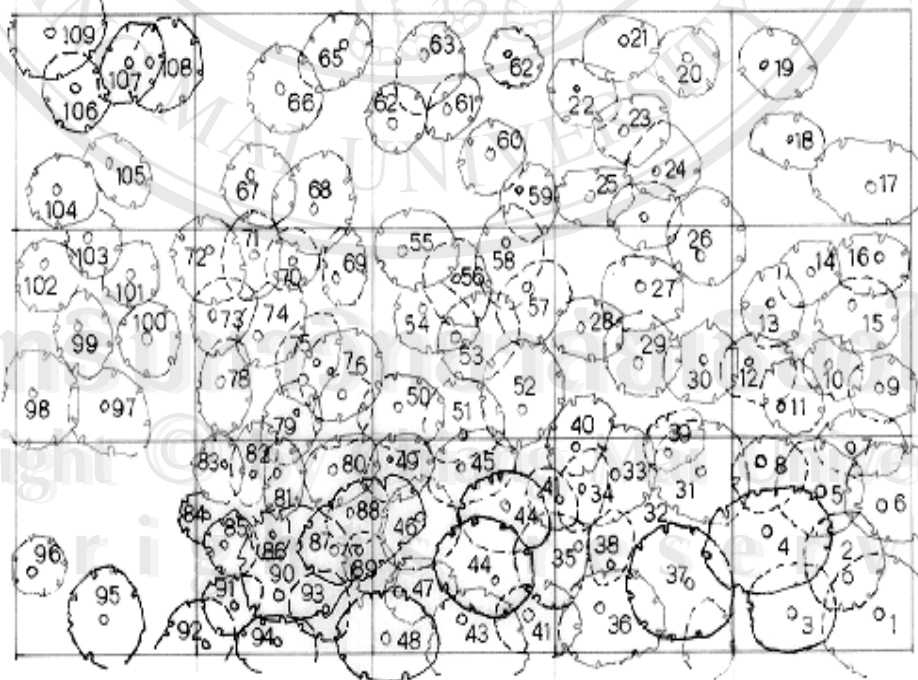
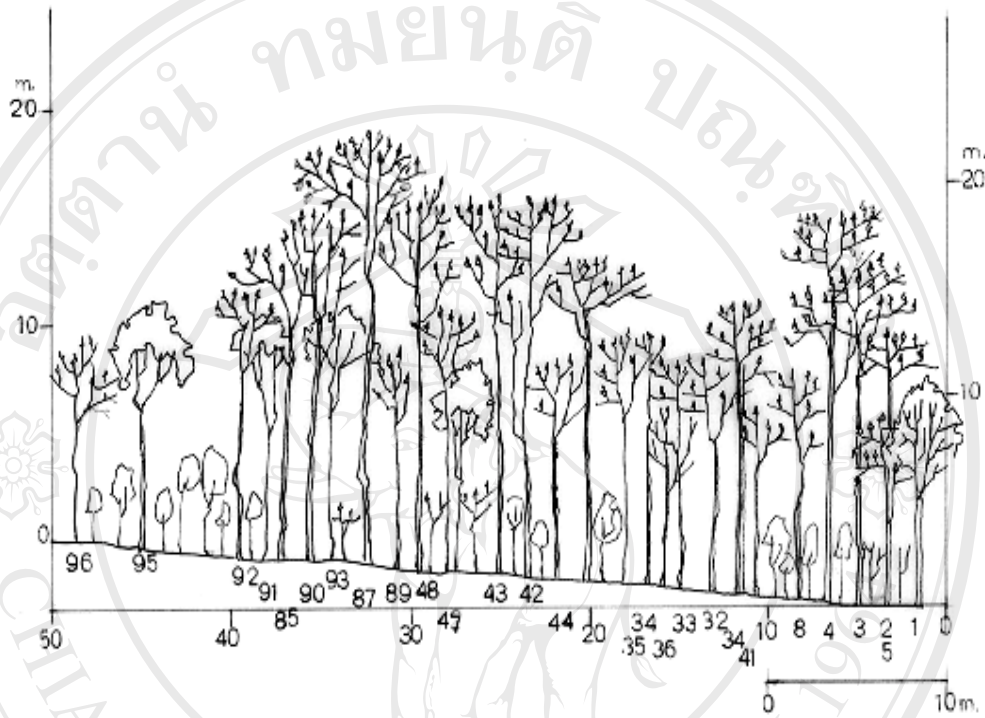
ลิขสิทธิ์มหาวิทยาลัยเชียงใหม่  
 Copyright © by Chiang Mai University  
 All rights reserved



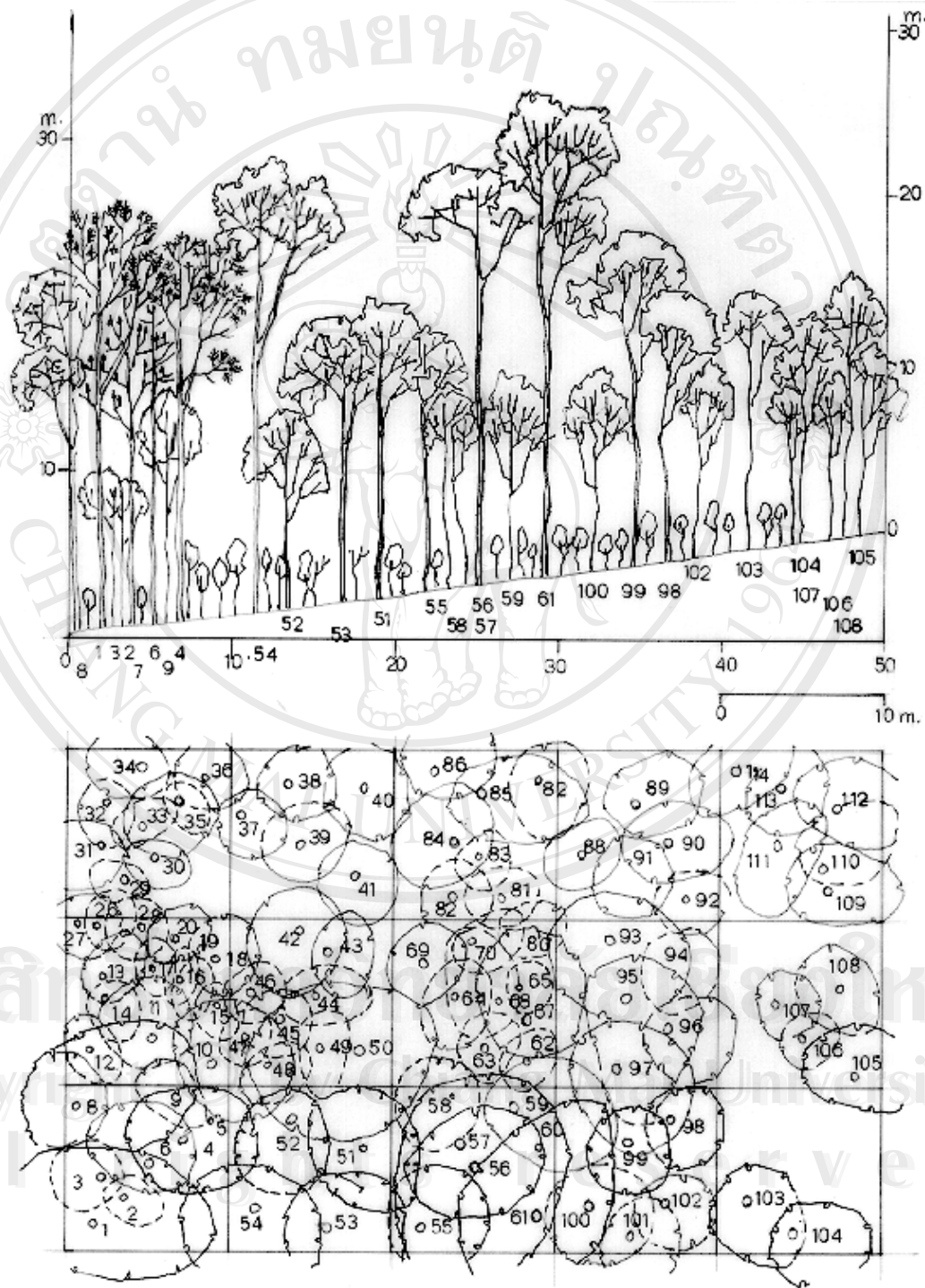
**Appendix J-8** Vertical and horizontal structures of 8<sup>th</sup> GL plot. Number indicated species number which providing details in CD-R attached in the back page.



**Appendix J-9** Vertical and horizontal structures of 1<sup>st</sup> DF plot. Number indicated species number which providing details in CD-R attached in the back page.

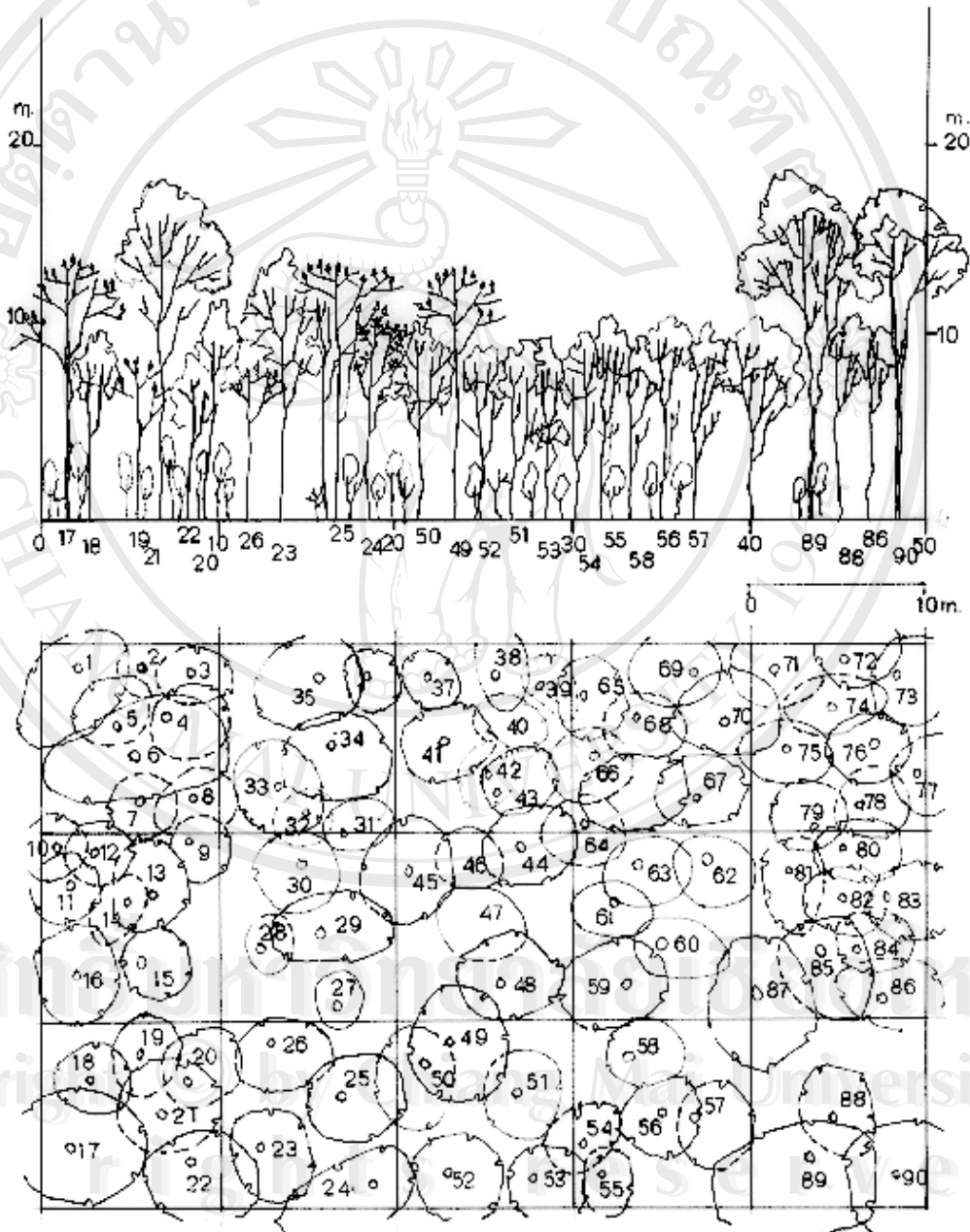


**Appendix J-10** Vertical and horizontal structures of 2<sup>nd</sup> DF plot. Number indicated species number which providing details in CD-R attached in the back page.



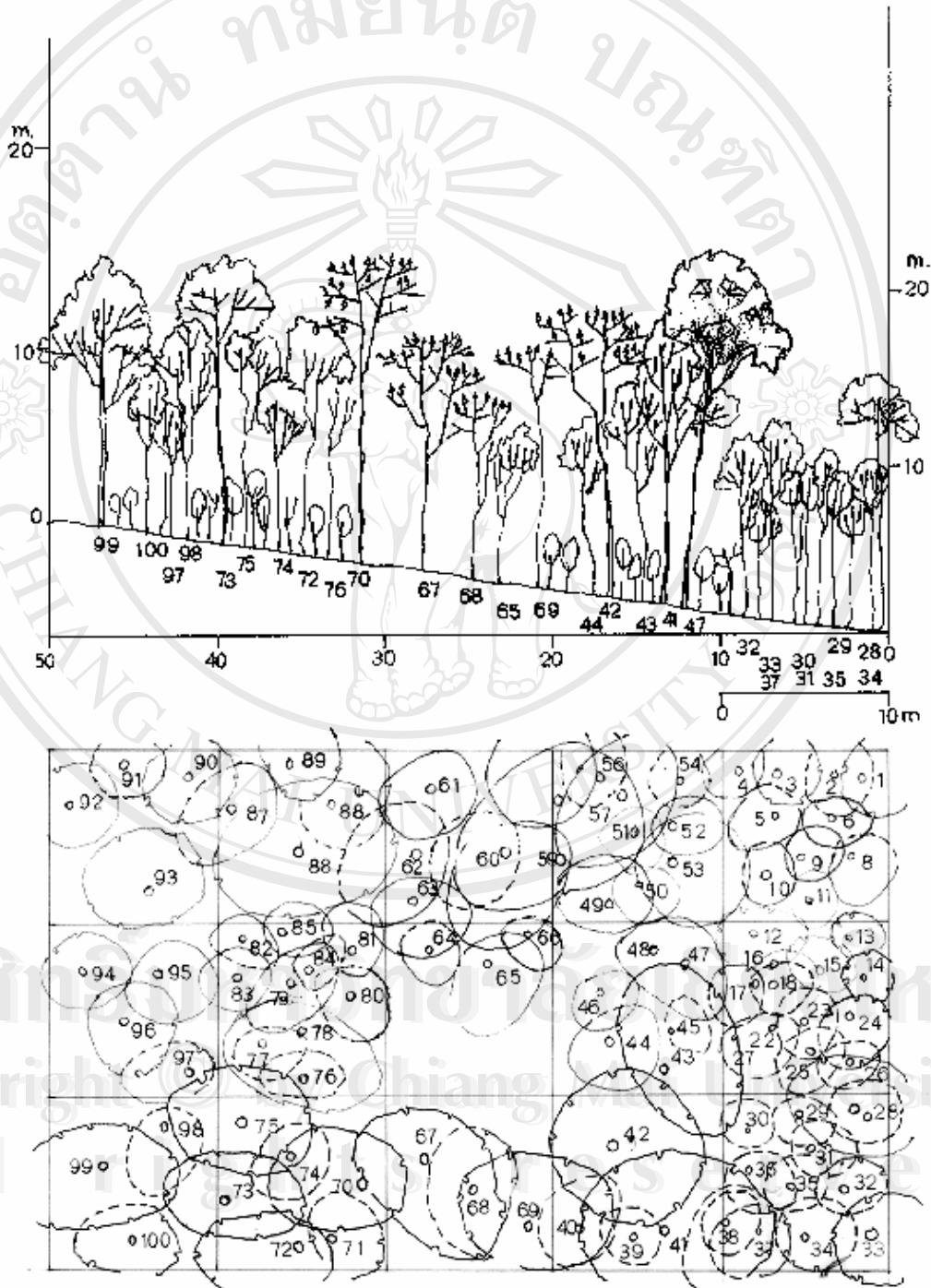


**Appendix J-11** Vertical and horizontal structures of 3<sup>rd</sup> DF plot. Number indicated species number which providing details in CD-R attached in the back page.

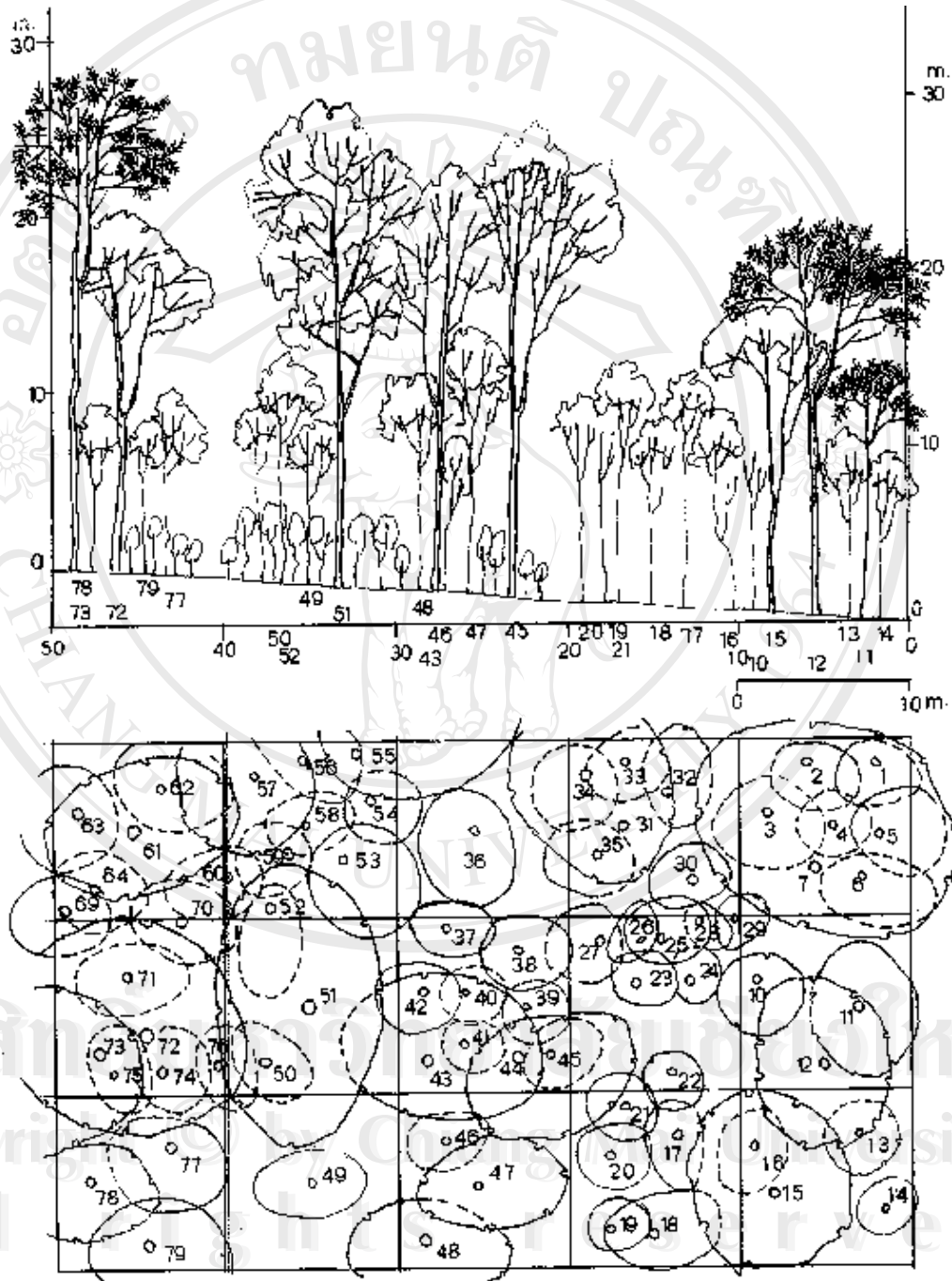




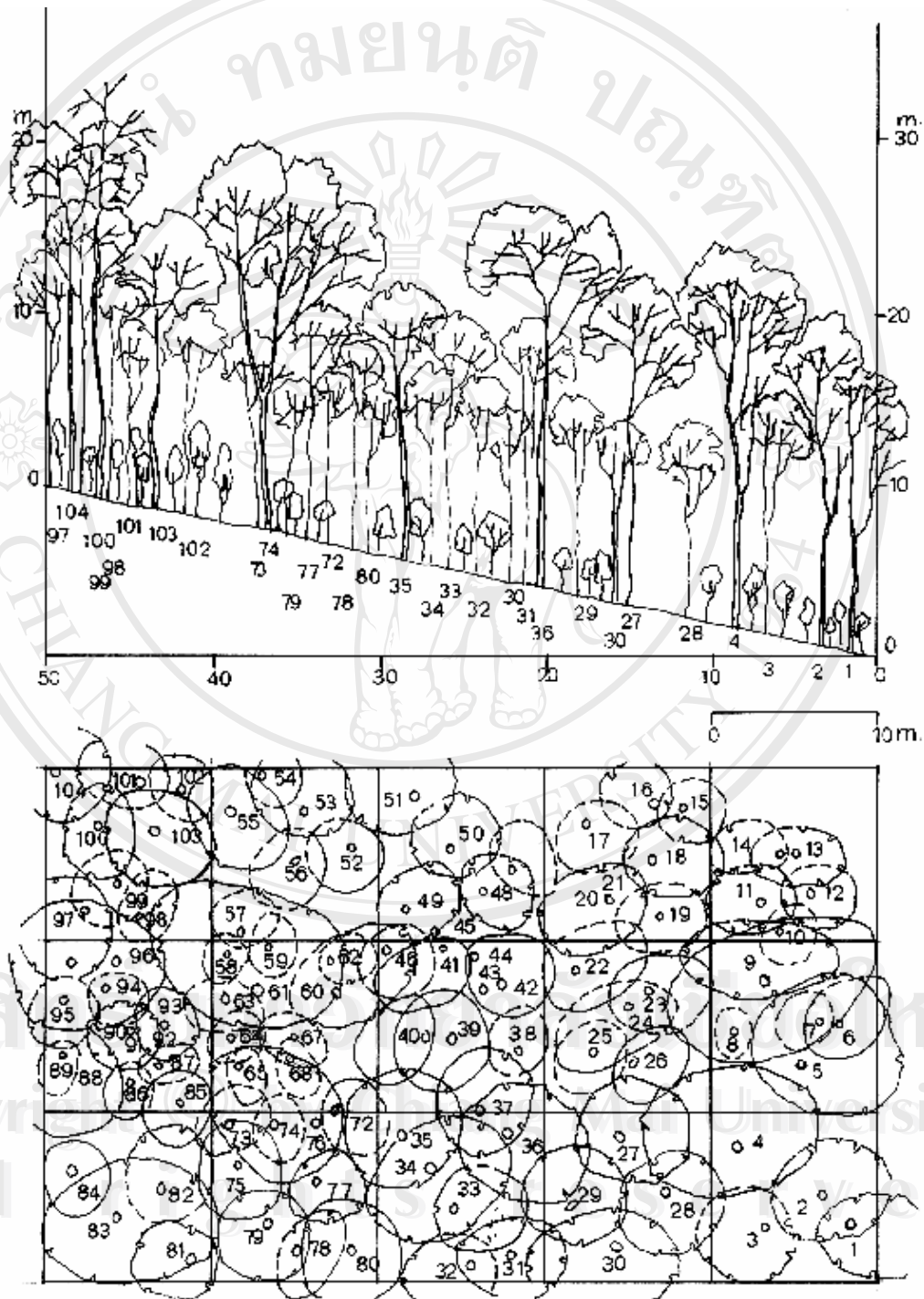
**Appendix J-12** Vertical and horizontal structures of 4<sup>th</sup> DF plot. Number indicated species number which providing details in CD-R attached in the back page.



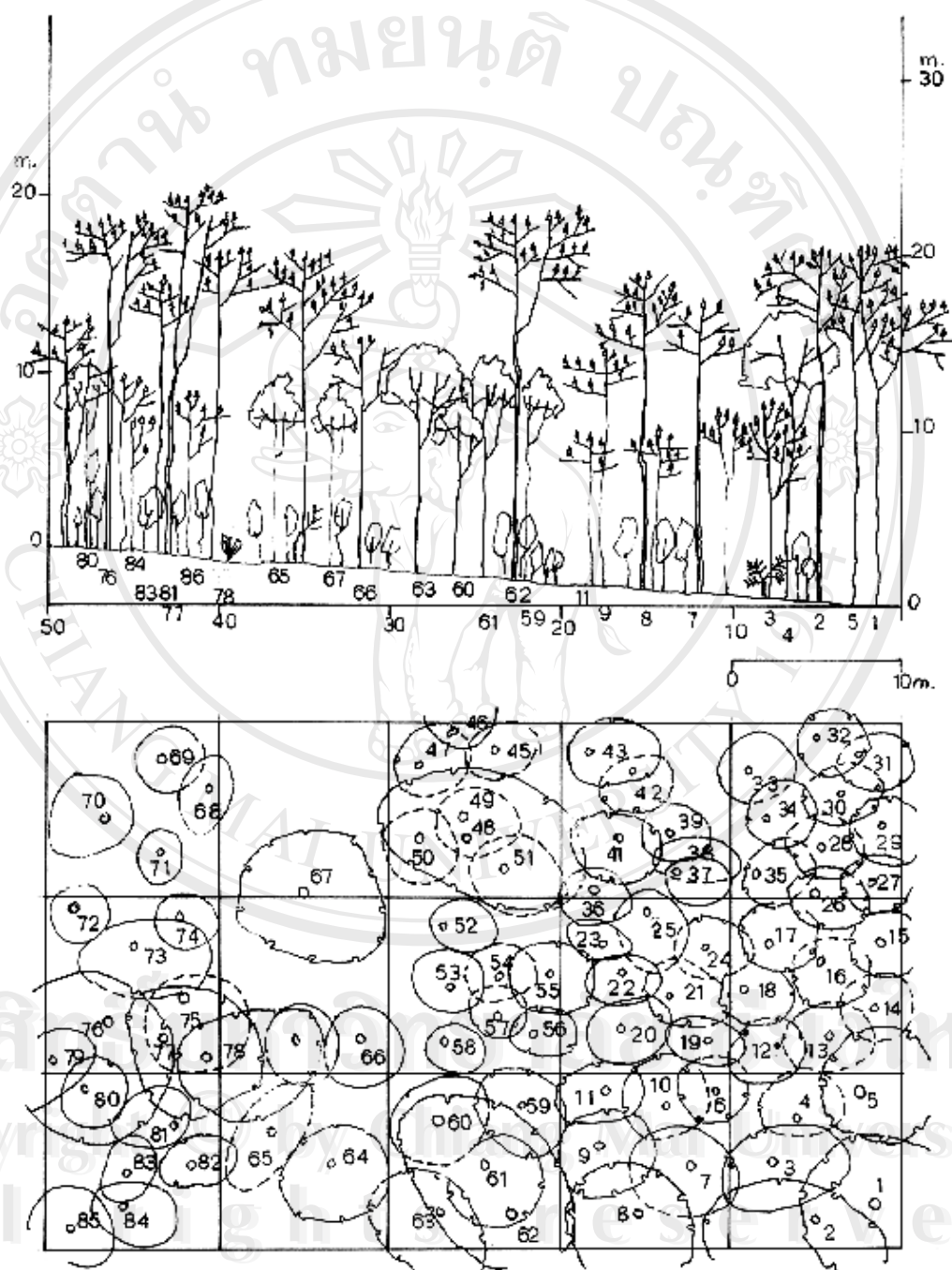
**Appendix J-13** Vertical and horizontal structures of 5<sup>th</sup> DF plot. Number indicated species number which providing details in CD-R attached in the back page.



**Appendix J-14** Vertical and horizontal structures of 6<sup>th</sup> DF plot. Number indicated species number which providing details in CD-R attached in the back page.

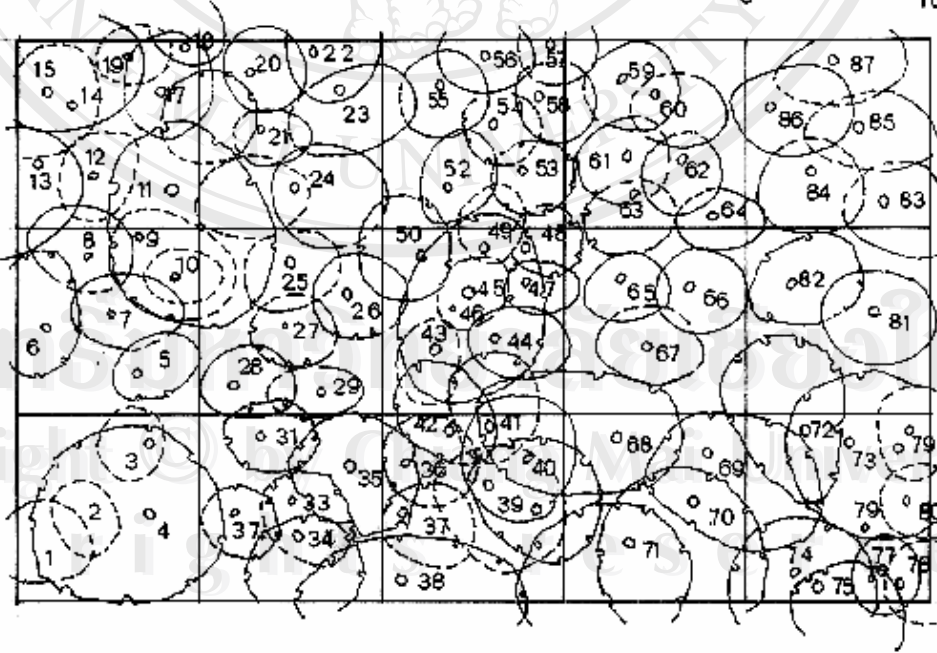
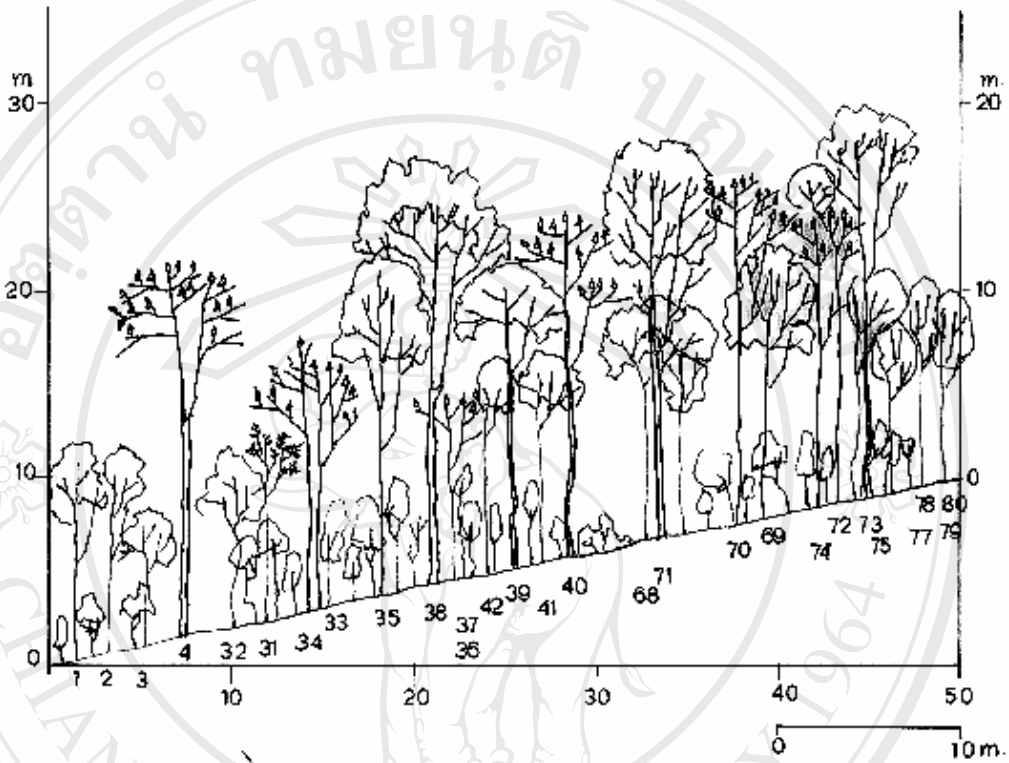


**Appendix J-15** Vertical and horizontal structures of 7<sup>th</sup> DF plot. Number indicated species number which providing details in CD-R attached in the back page.



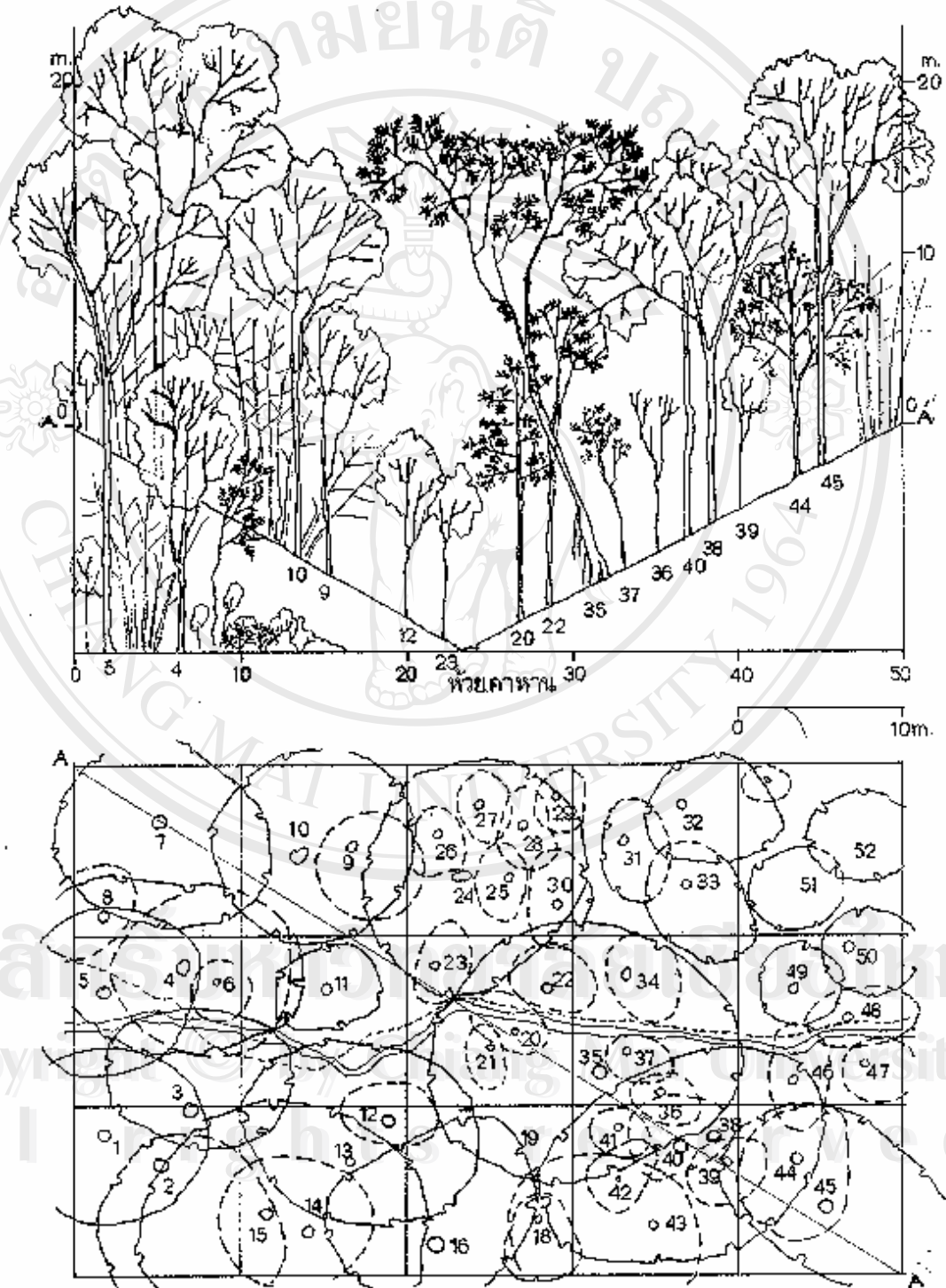


**Appendix J-16** Vertical and horizontal structures of 8<sup>th</sup> DF plot. Number indicated species number which providing details in CD-R attached in the back page.

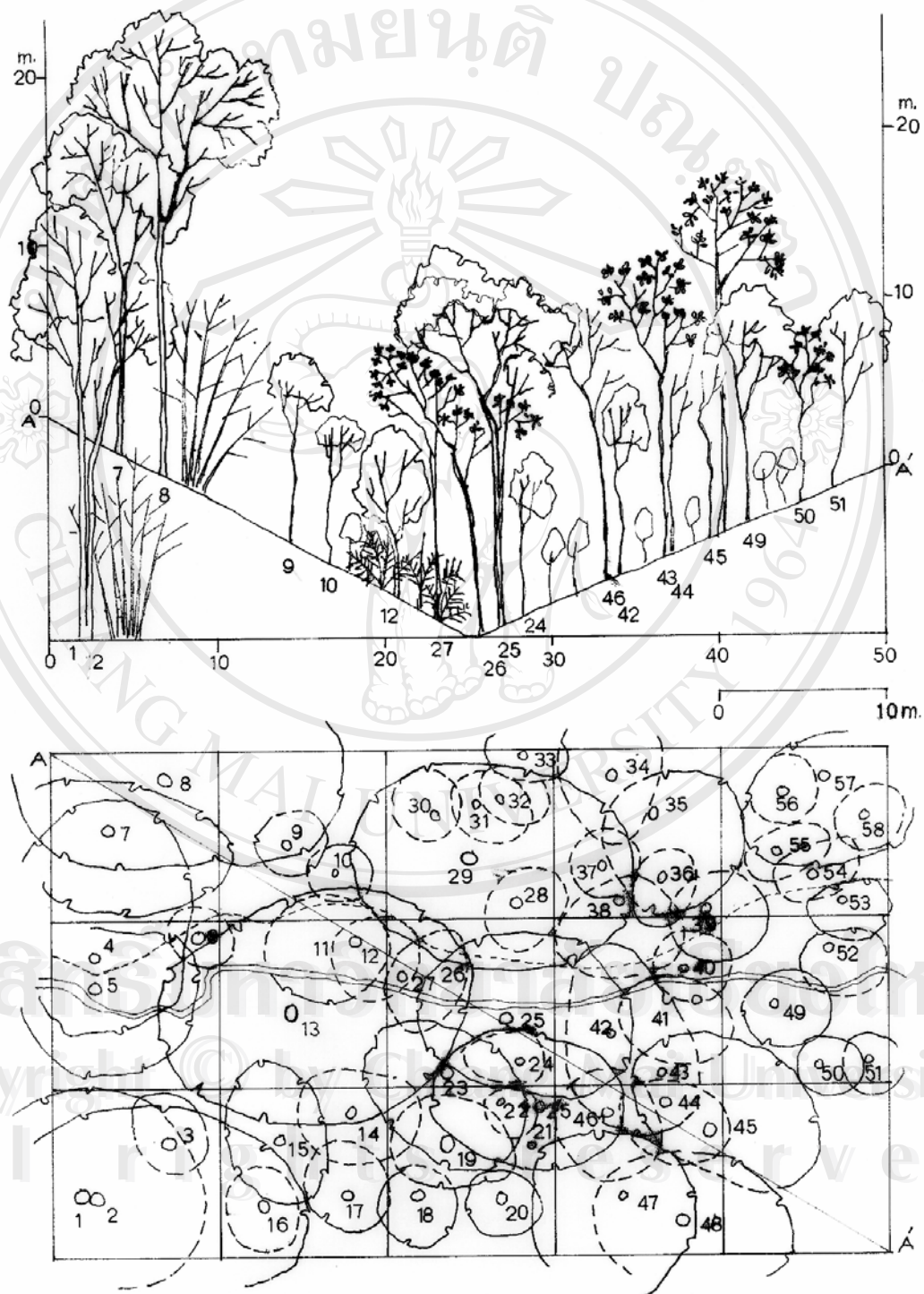


ลิขสิทธิ์สงวน  
Copyright © 2014  
All rights reserved

**Appendix J-17** Vertical and horizontal structures of 1<sup>st</sup> DDF plot. Number indicated species number which providing details in CD-R attached in the back page.

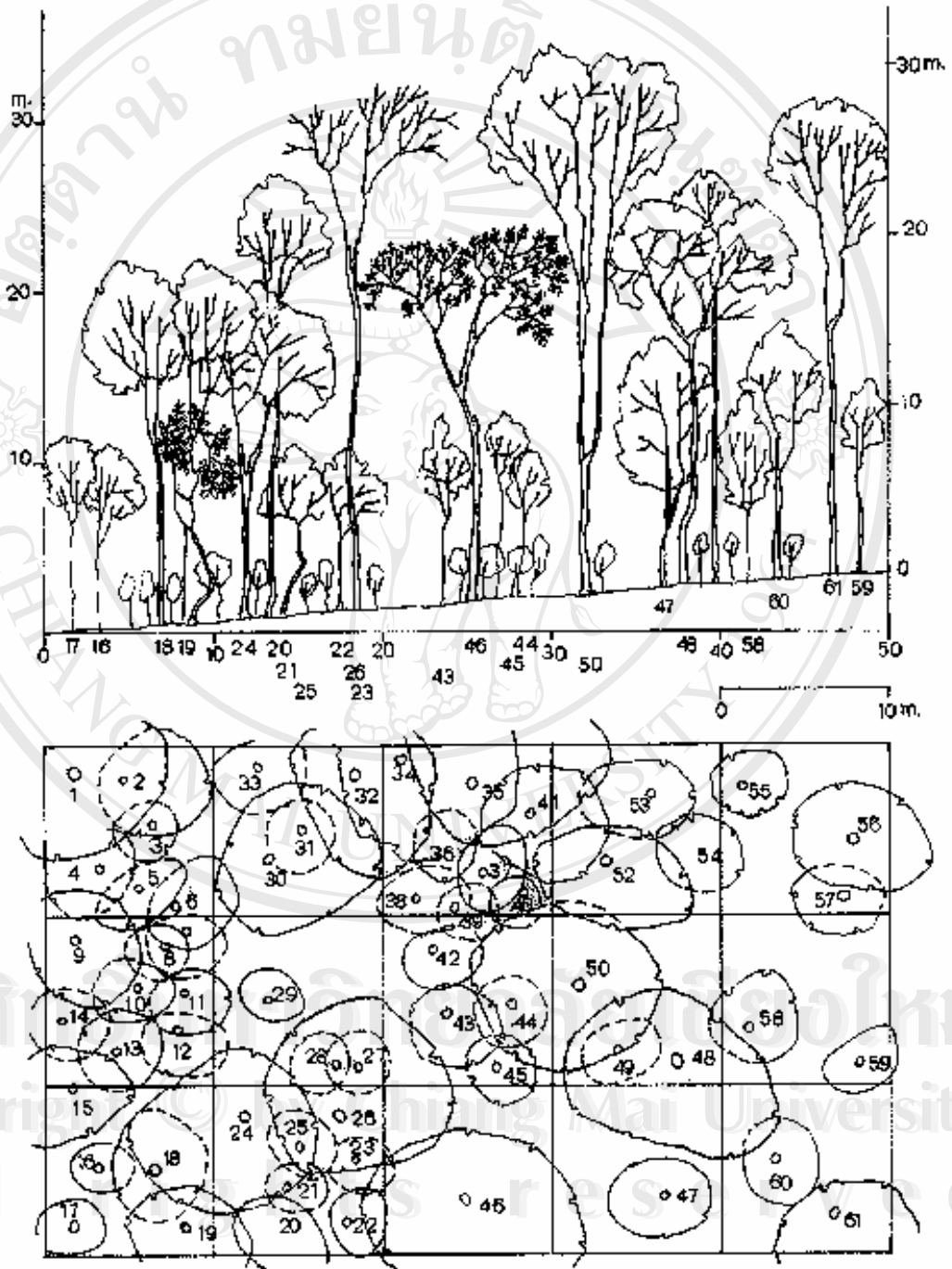


**Appendix J-18** Vertical and horizontal structures of 2<sup>nd</sup> DDF plot. Number indicated species number which providing details in CD-R attached in the back page.

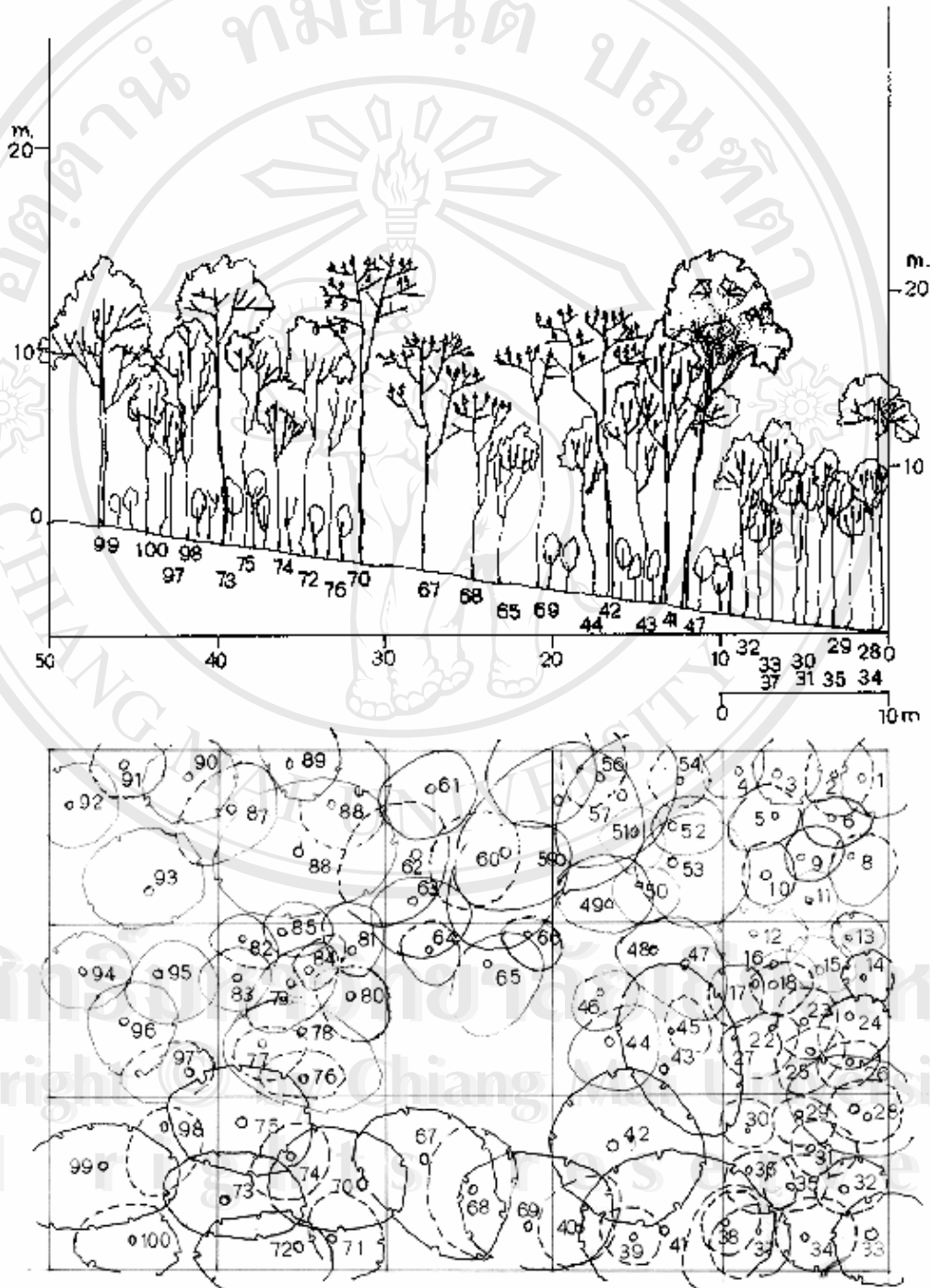




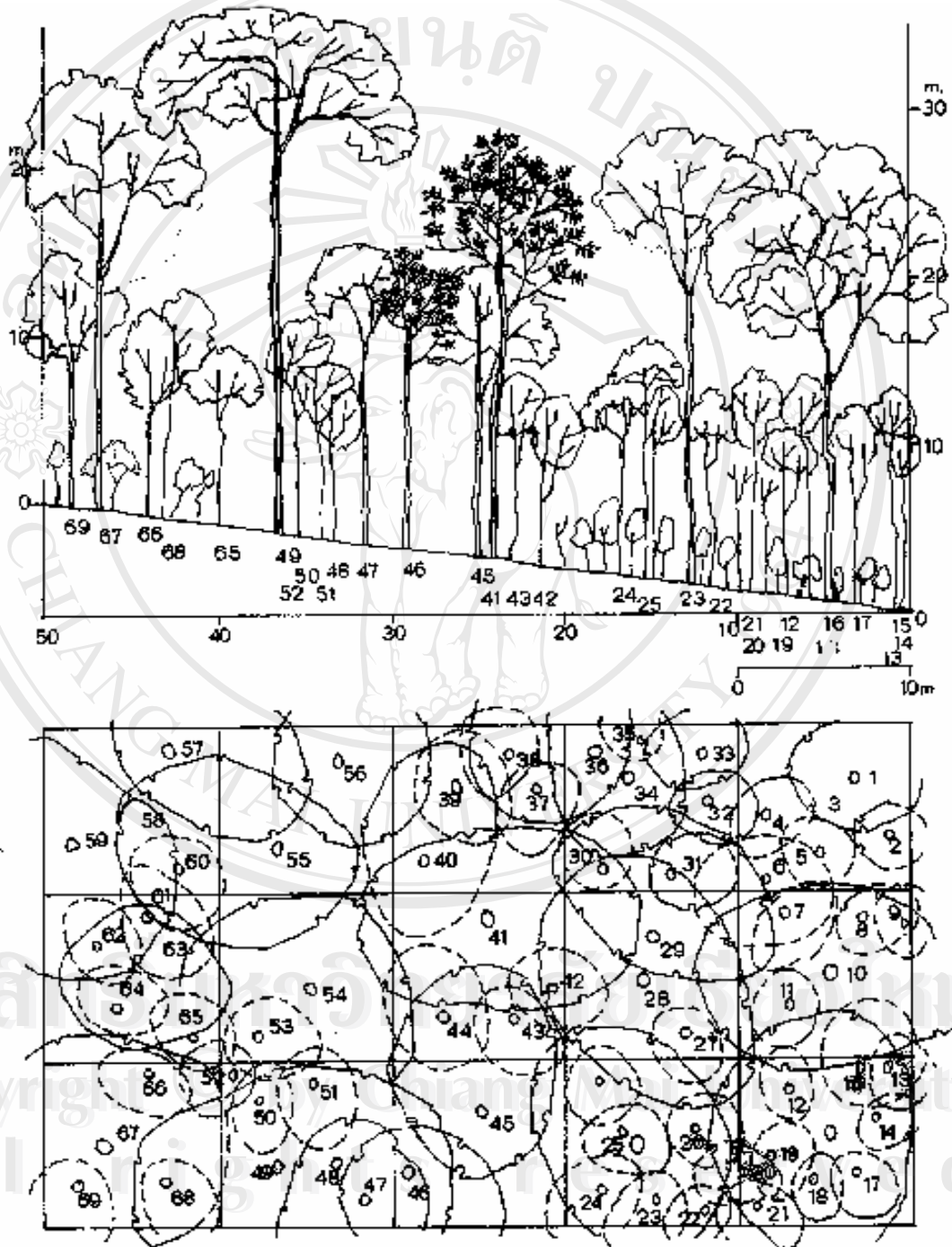
**Appendix J-19** Vertical and horizontal structures of 3<sup>rd</sup> DDF plot. Number indicated species number which providing details in CD-R attached in the back page.



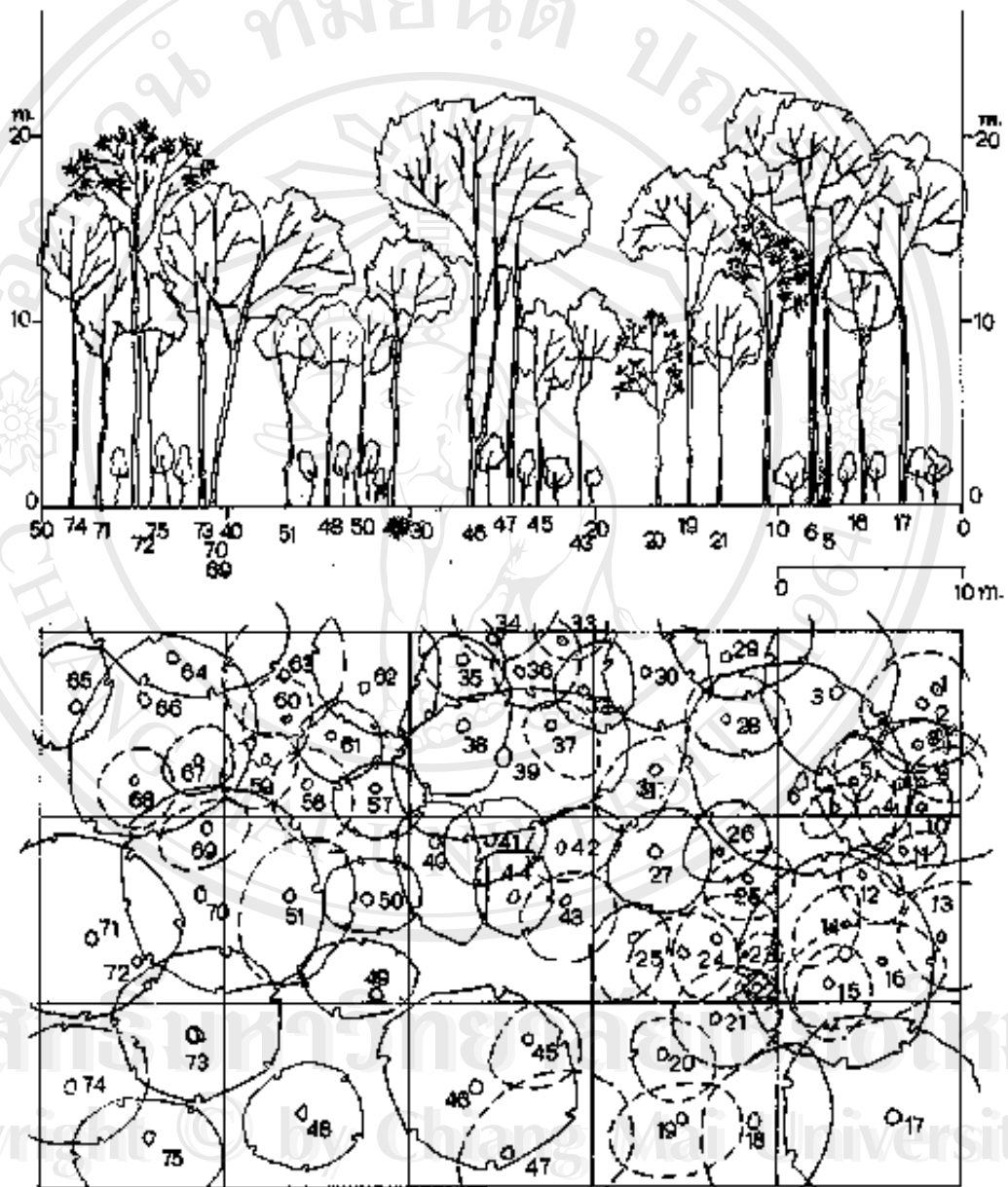
**Appendix J-20** Vertical and horizontal structures of 4<sup>th</sup> DDF plot. Number indicated species number which providing details in CD-R attached in the back page.



**Appendix J-21** Vertical and horizontal structures of 5<sup>th</sup> DDF plot. Number indicated species number which providing details in CD-R attached in the back page.

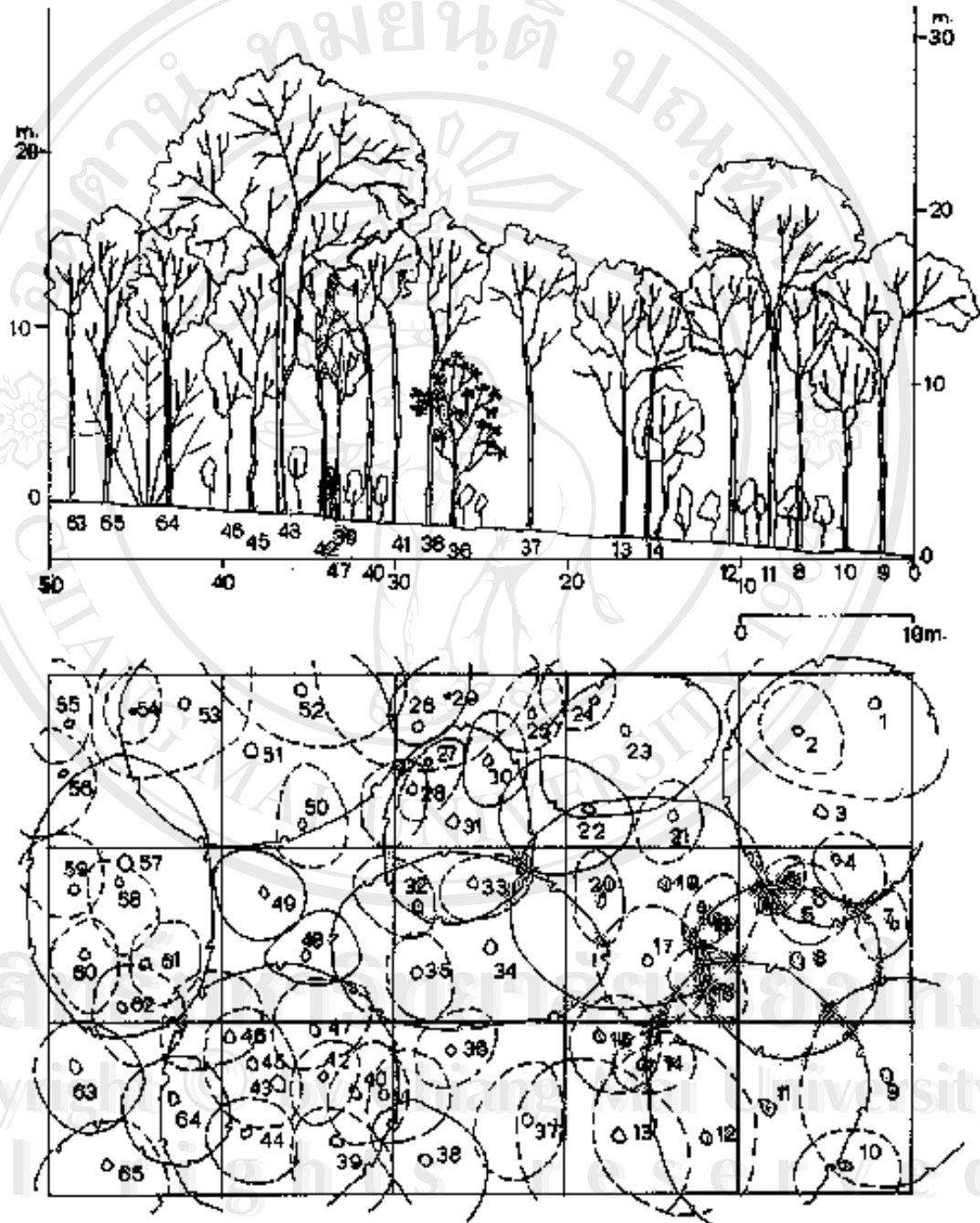


**Appendix J-22** Vertical and horizontal structures of 6<sup>th</sup> DDF plot. Number indicated species number which providing details in CD-R attached in the back page.

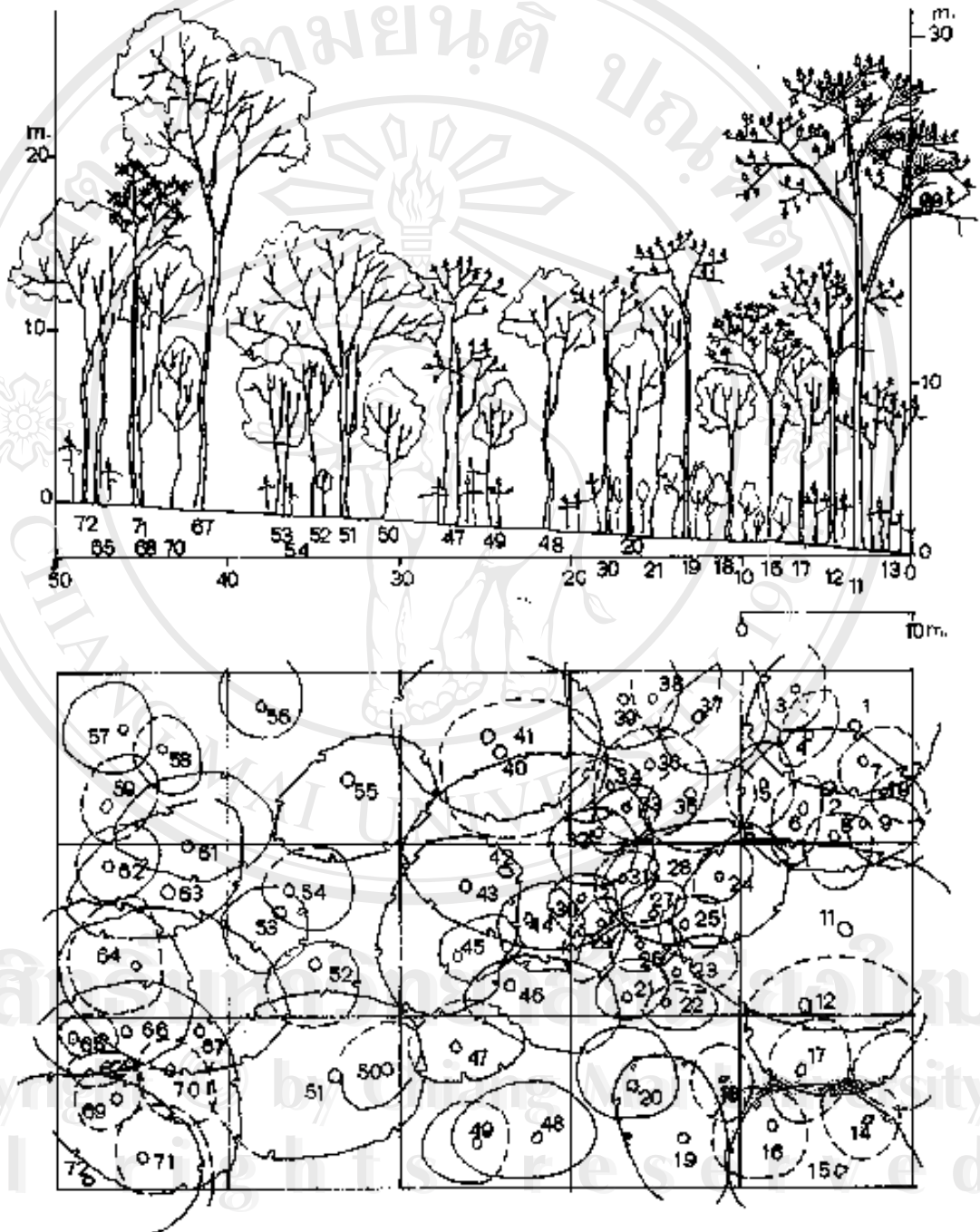




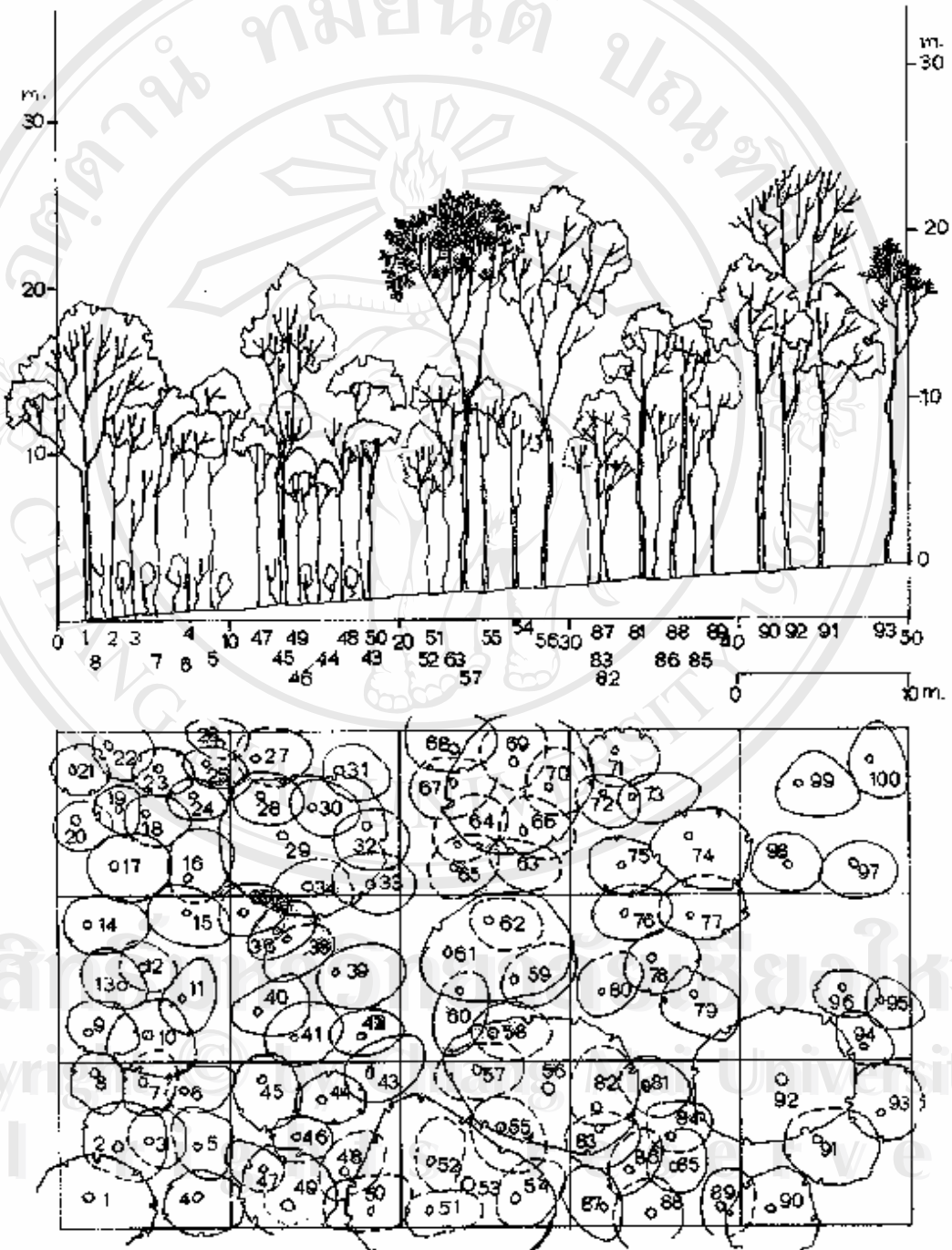
**Appendix J-23** Vertical and horizontal structures of 7<sup>th</sup> DDF plot. Number indicated species number which providing details in CD-R attached in the back page.



**Appendix J-24** Vertical and horizontal structures of 8<sup>th</sup> DDF plot. Number indicated species number which providing details in CD-R attached in the back page.

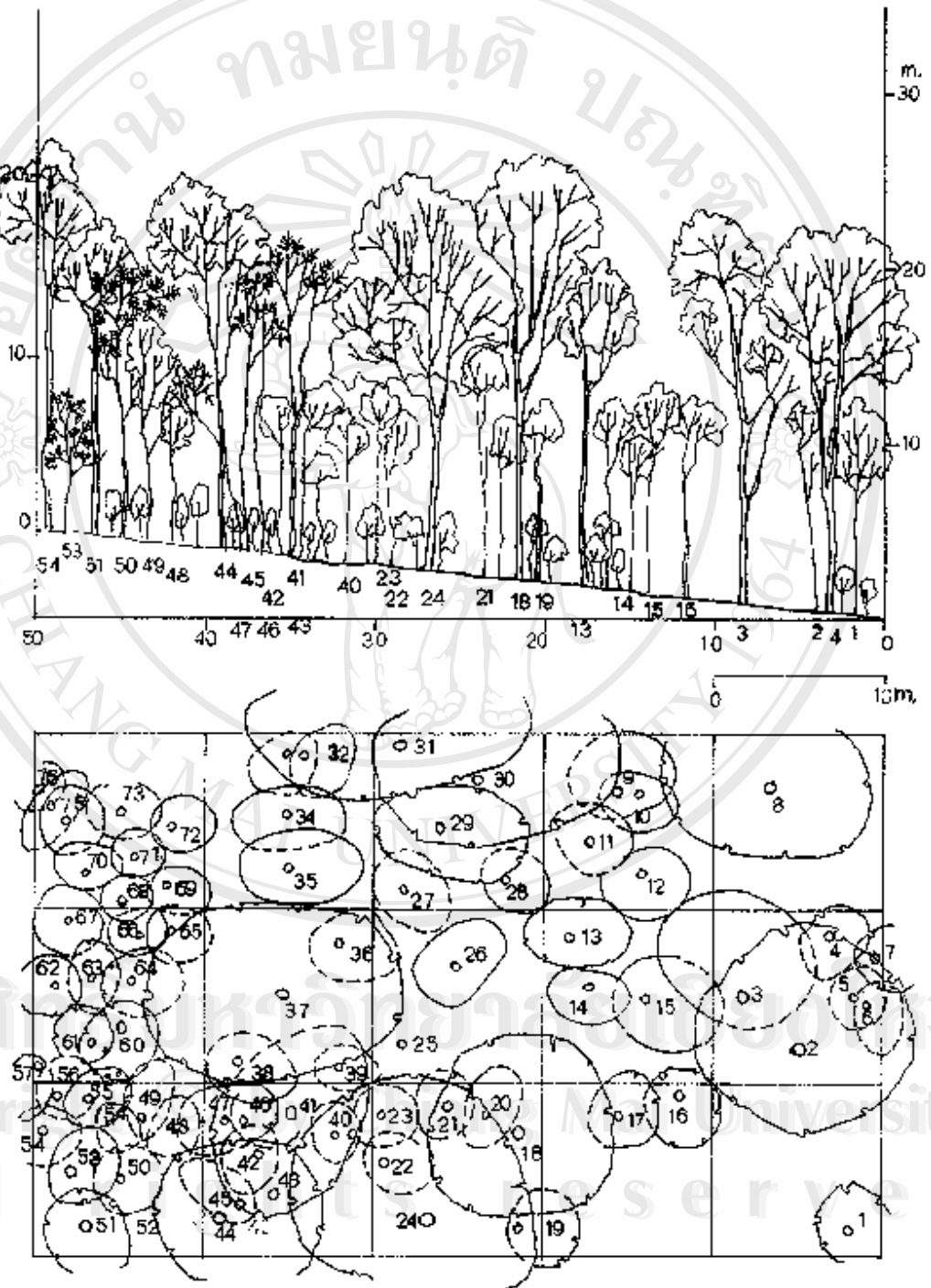


**Appendix J-25** Vertical and horizontal structures of 1<sup>st</sup> DEF plot. Number indicated species number which providing details in CD-R attached in the back page.

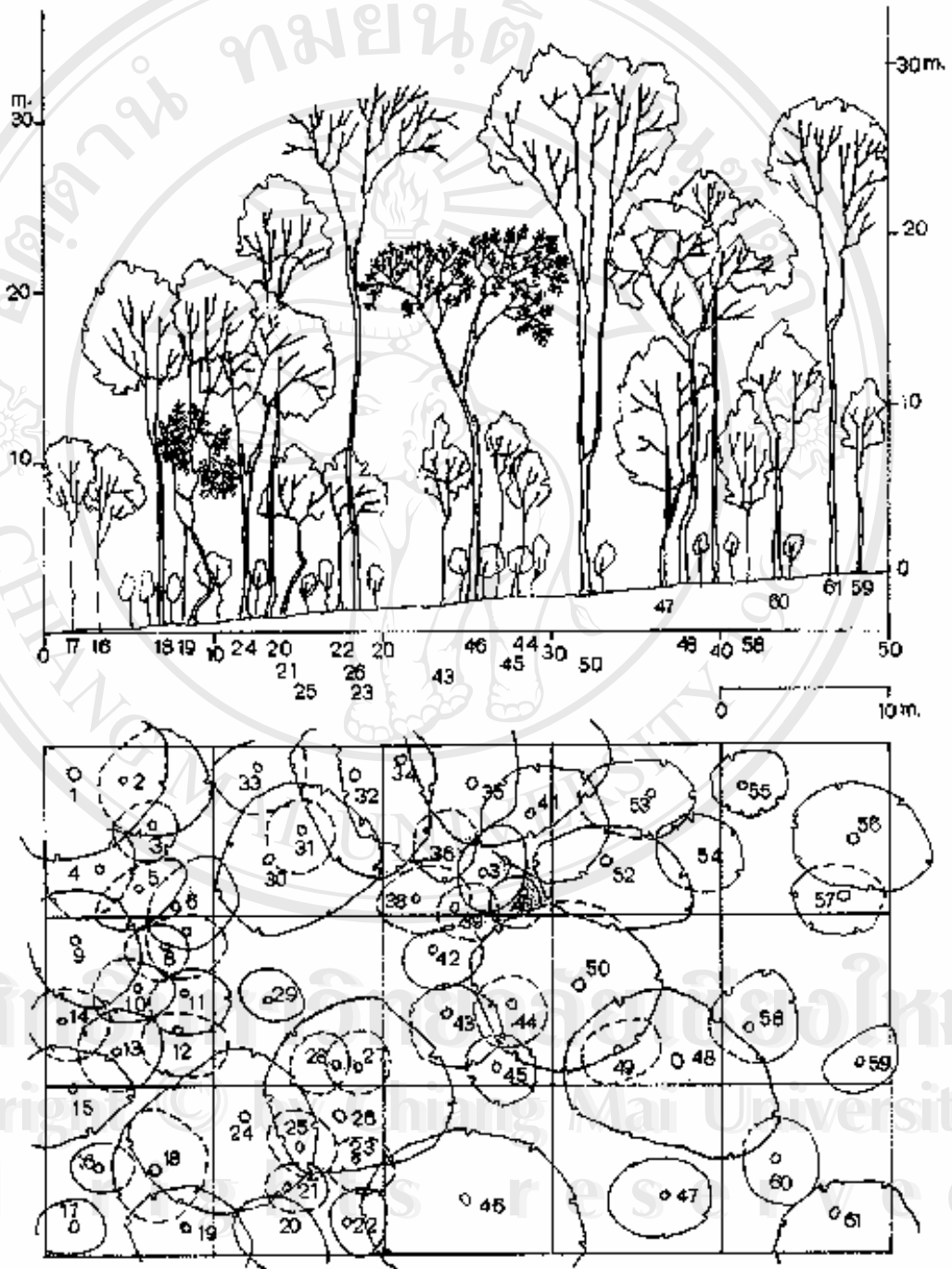




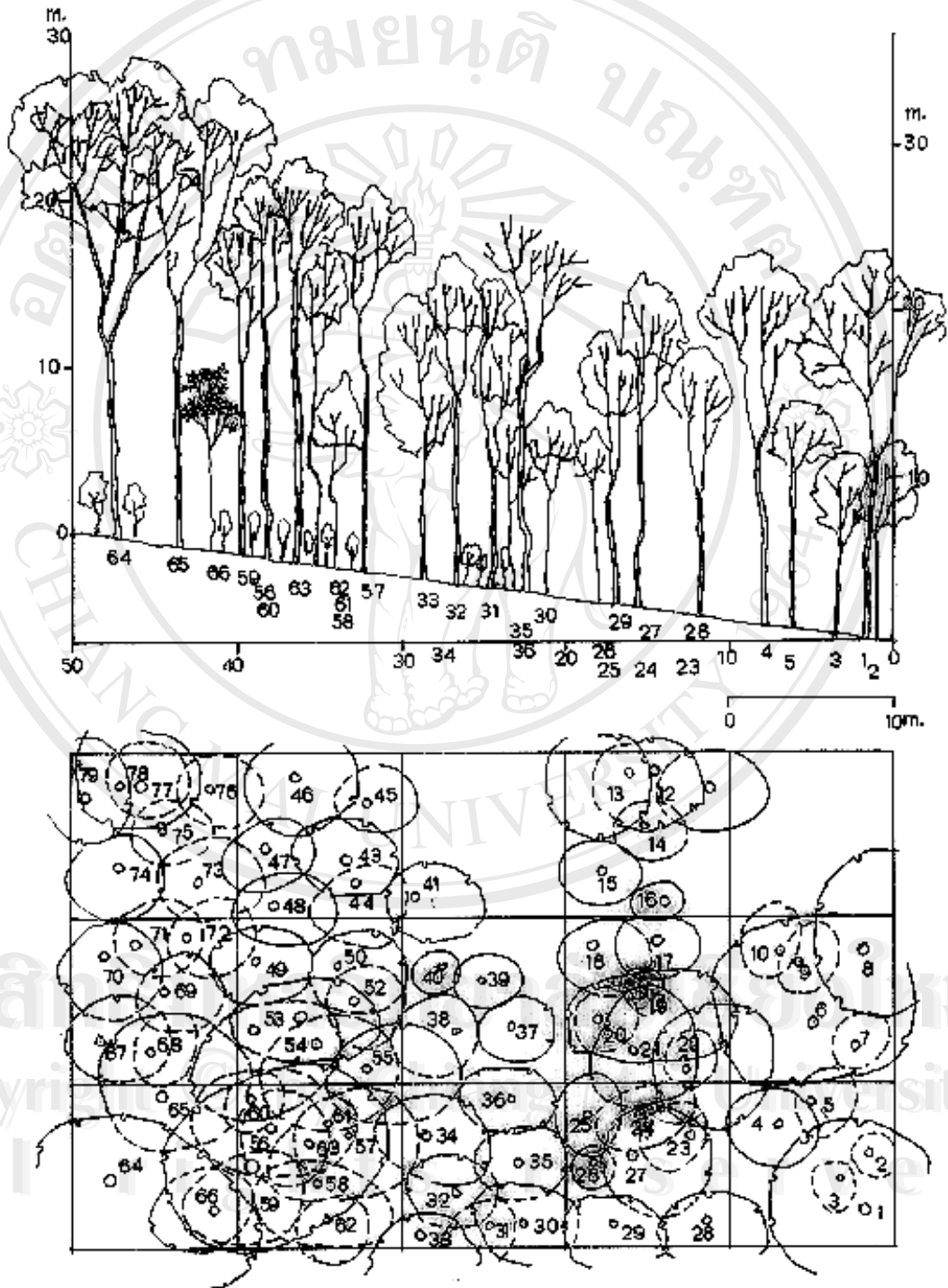
**Appendix J-26** Vertical and horizontal structures of 2<sup>nd</sup> DEF plot. Number indicated species number which providing details in CD-R attached in the back page.



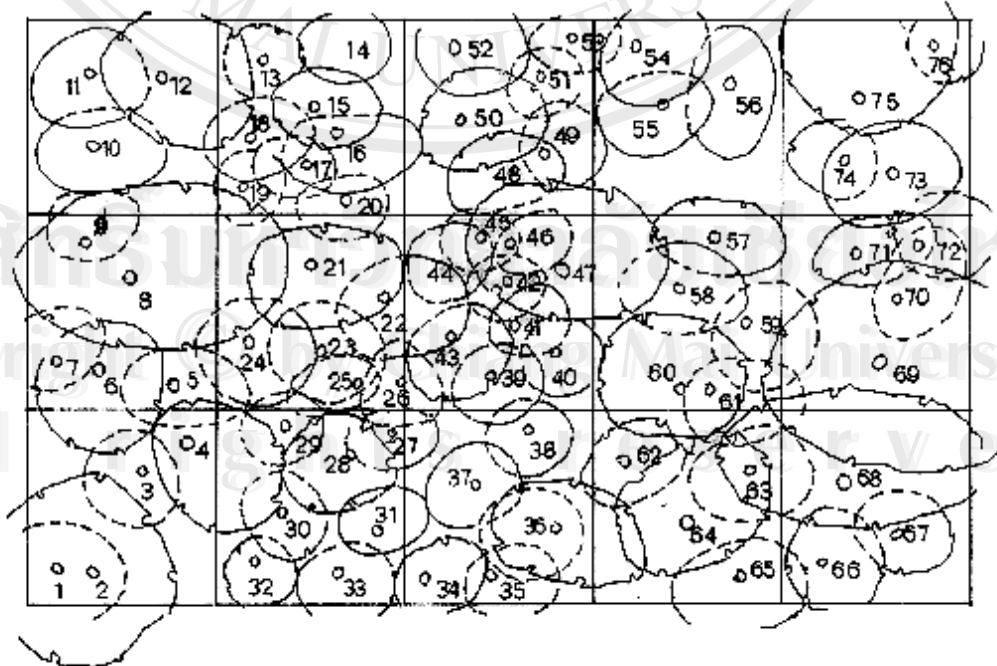
**Appendix J-27** Vertical and horizontal structures of 3<sup>rd</sup> DEF plot. Number indicated species number which providing details in CD-R attached in the back page.



**Appendix J-28** Vertical and horizontal structures of 4<sup>th</sup> DEF plot. Number indicated species number which providing details in CD-R attached in the back page.

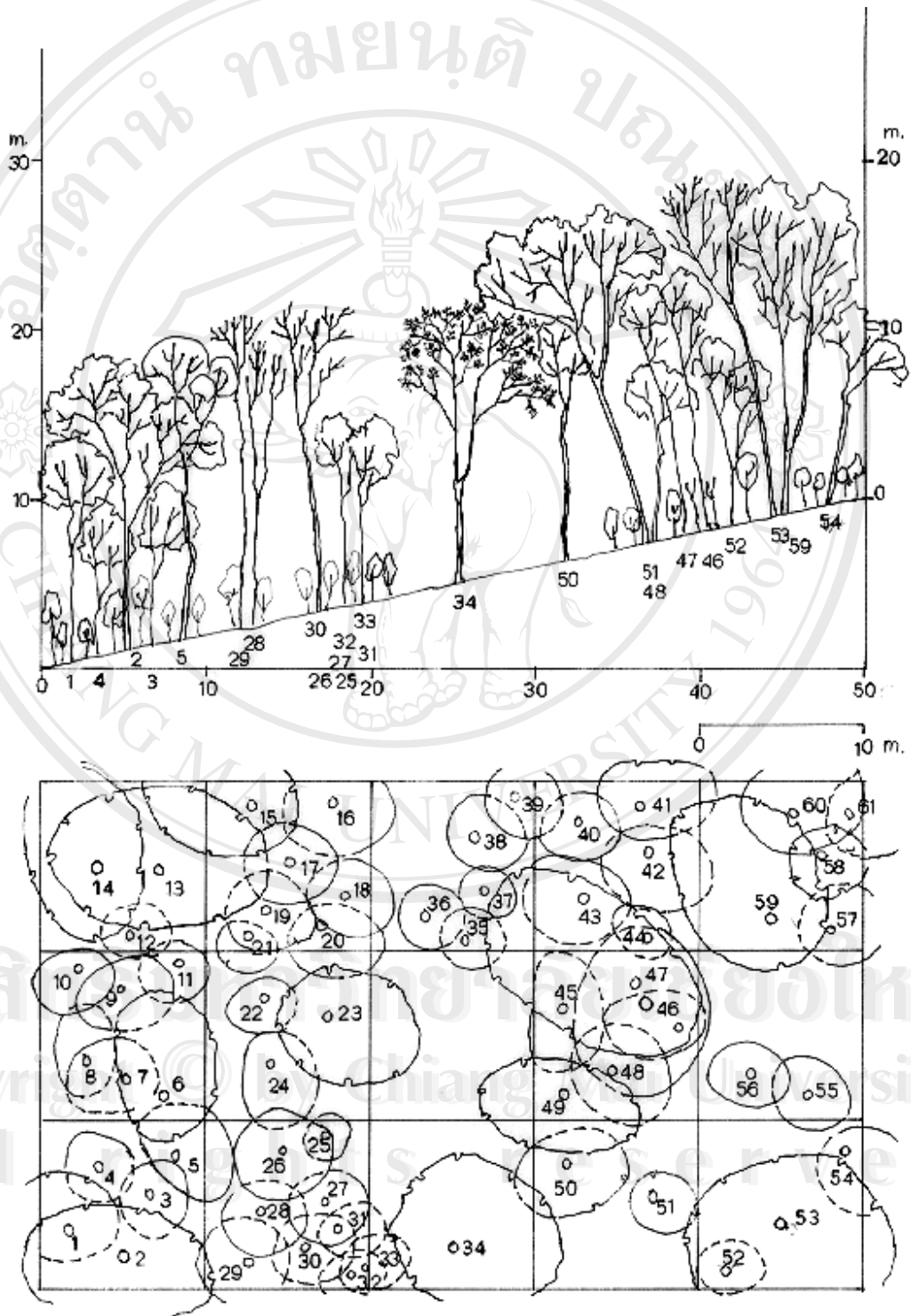


**Appendix J-29** Vertical and horizontal structures of 5<sup>th</sup> DEF plot. Number indicated species number which providing details in CD-R attached in the back page.

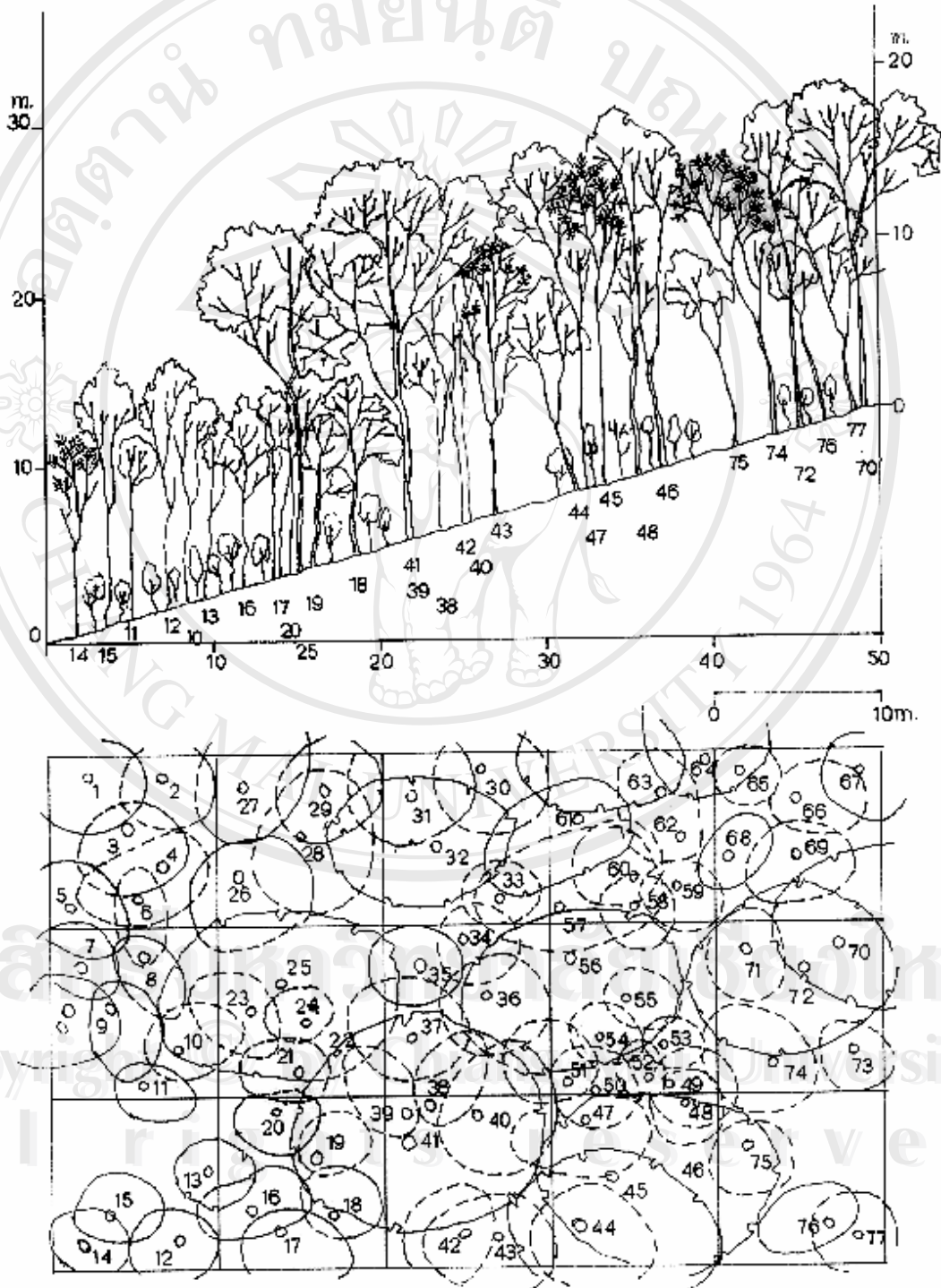




**Appendix J-30** Vertical and horizontal structures of 6<sup>th</sup> DEF plot. Number indicated species number which providing details in CD-R attached in the back page.

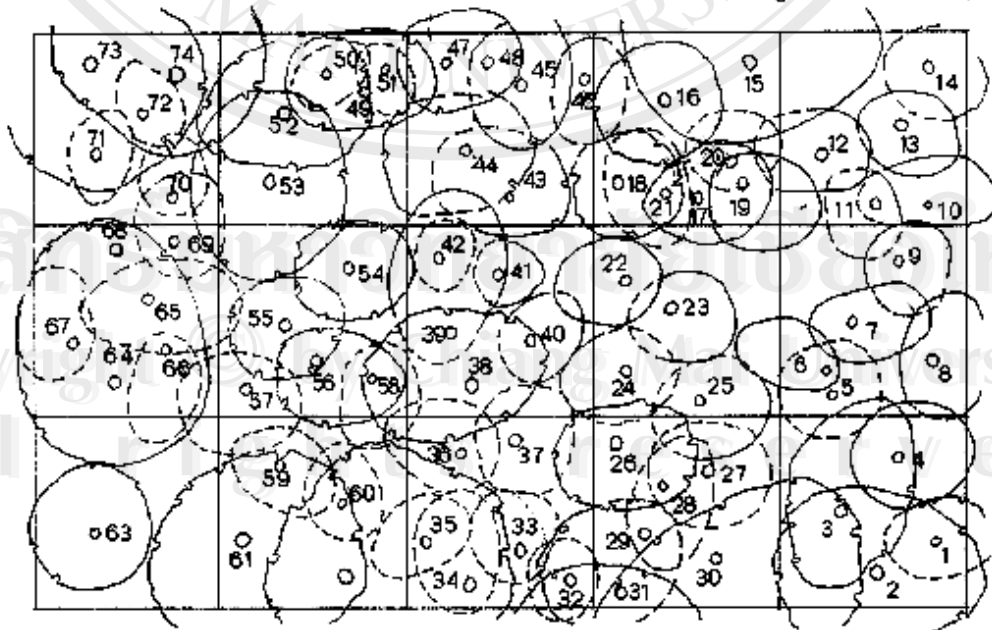


**Appendix J-31** Vertical and horizontal structures of 7<sup>th</sup> DEF plot. Number indicated species number which providing details in CD-R attached in the back page.



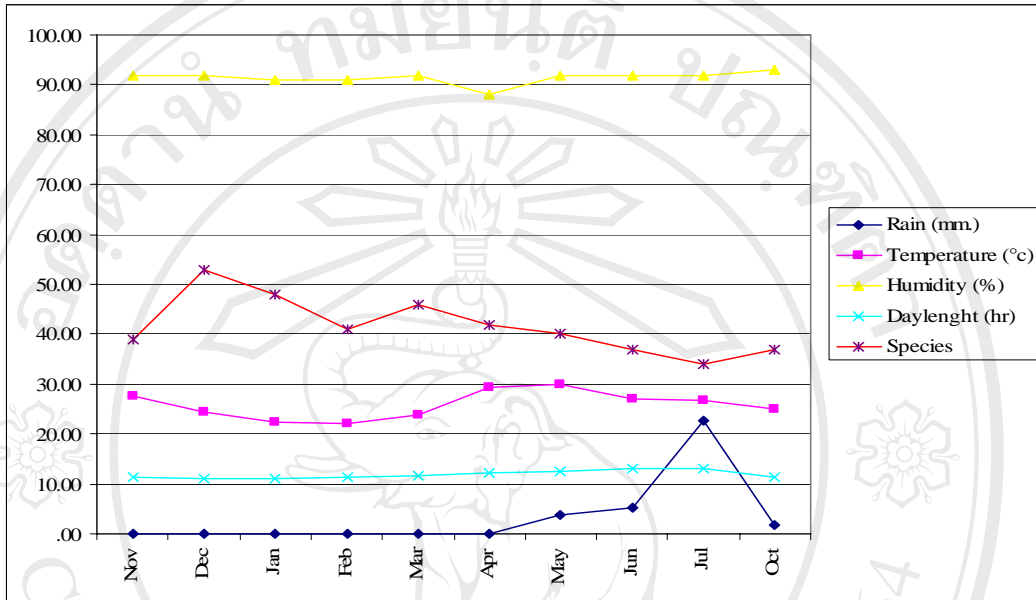


**Appendix J-32** Vertical and horizontal structures of 8<sup>th</sup> DEF plot. Number indicated species number which providing details in CD-R attached in the back page.

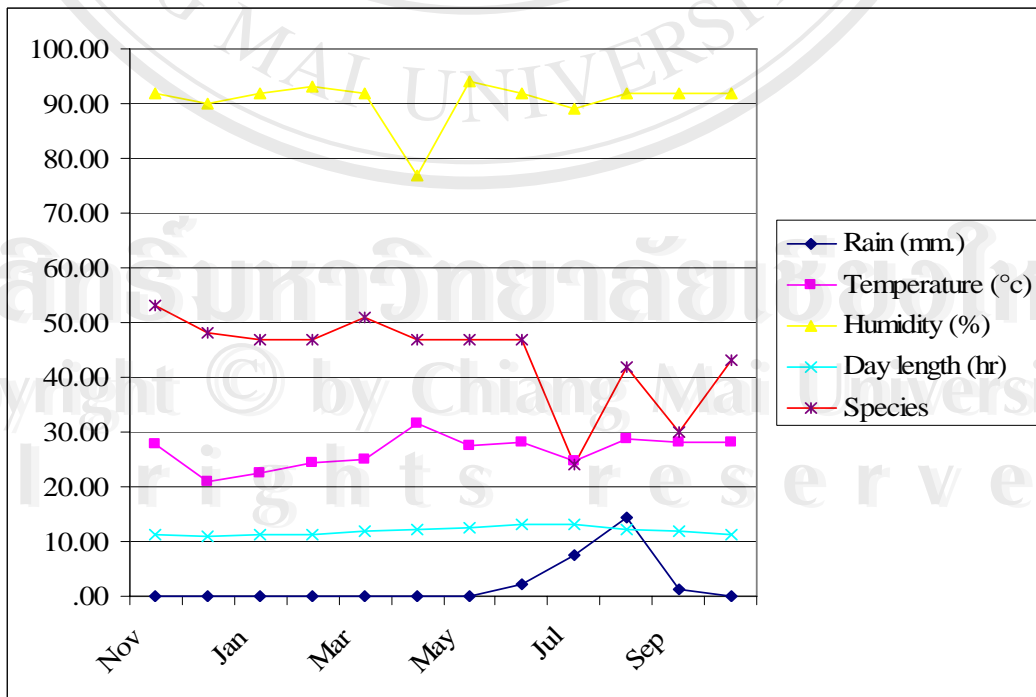


**Appendix K** Environmental data collected by rangers of forest protection units of Salween Wildlife Sanctuary during July 2002-June 2003 in different types of forest.

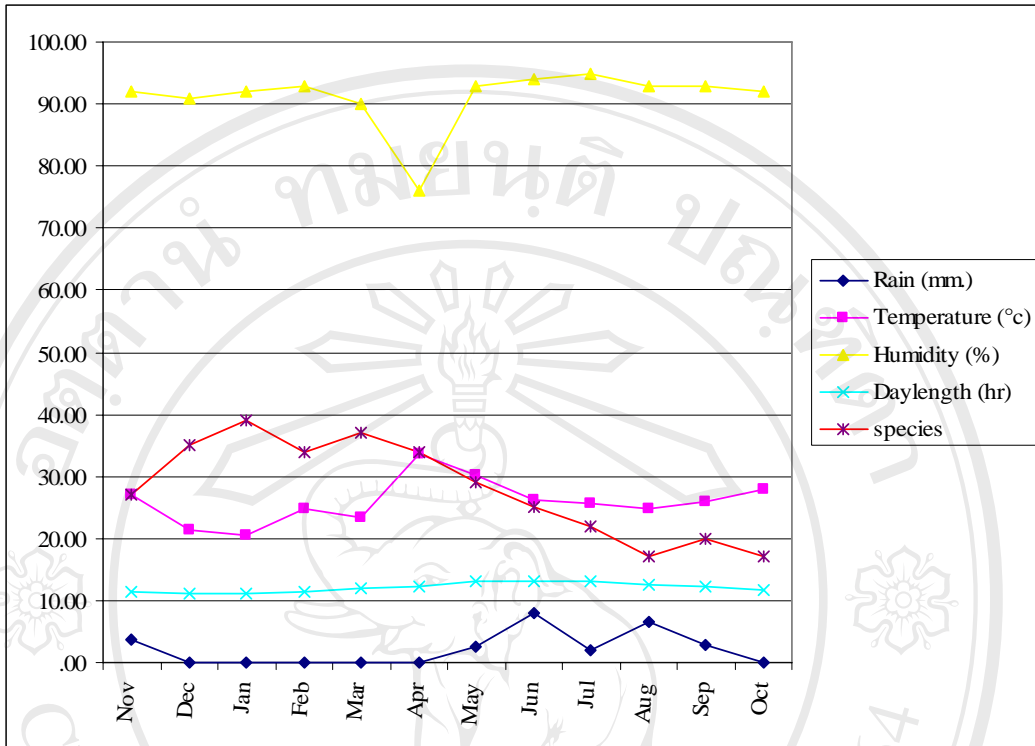
**GL**



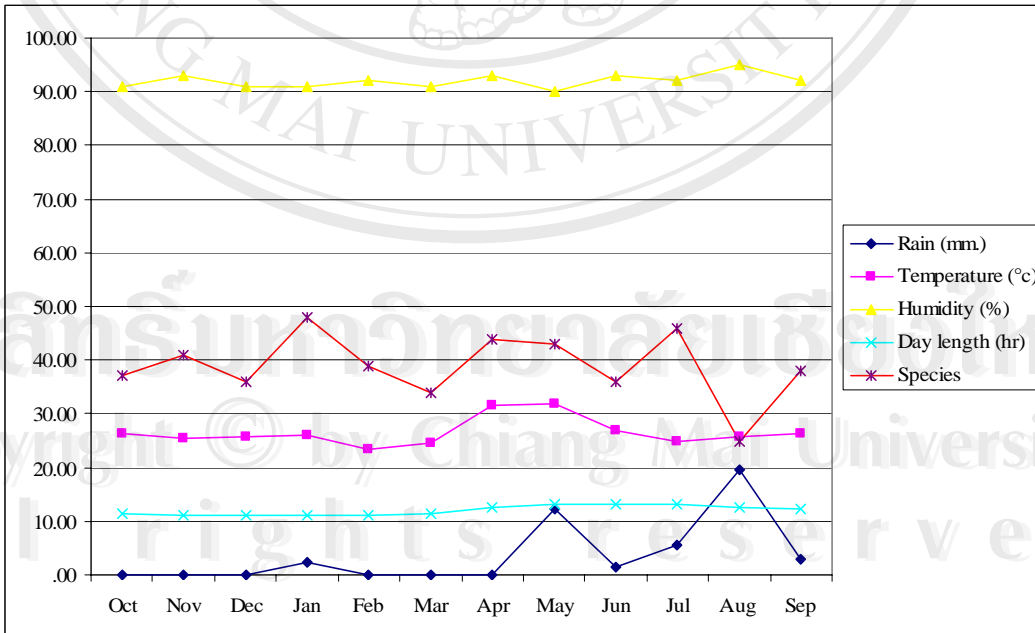
**DF**



**DDF**



**DEF**



## APPENDIX L Calculation Procedure

### 1. Plants:

#### 1.1 Frequency of Species A

$$(F_A) = \frac{\text{Total Number of Plots Species A present}}{\text{Total Number of Study Plots}} \times 100$$

$$\text{Relative Frequency of Species A } (RF_A) = \frac{\sum_{A=1}^n F_A}{\sum_{i=1}^n F_i} \times 100$$

#### 1.2 Density of Species A = $\frac{\text{Total Number of Species A}}{\text{Total Sampling Plots}} \times 100$

$$\text{Relative Density of Species A} = \frac{\text{Density}_{\text{Species A}}}{\sum_{i=1}^n \text{Density}_{\text{Species I}}} \times 100$$

#### 1.3 Dominance of Species A = $\pi \frac{D_{\text{Species A}}^2}{4}$

Where  $D_{\text{Species A}}$  = Diameter at breast height of Species A

$$\text{Relative Dominance of Species A} = \frac{D_{\text{Species A}}}{\sum_{i=1}^n D_{o_i}}$$

#### 1.4 Importance Value Index of Species A (IVI) = $RF_A + RD_A + RDo_A$

#### 1.5 Shannon Diversity Index

$$H' = -\sum_{i=1}^s (P_i \ln P_i)$$

Where  $H$  = Diversity Index

$P_i$  = The proportion of individuals found in the  $i^{\text{th}}$  species

$\ln$  = Natural logarithms

$$\text{Evenness, } E = \frac{H'}{\ln S}$$

$H'$  = Diversity index

$S$  = Number of species

## 2. Birds:

$$2.1 \text{ Simplified Morisita Index } (C_H) = \frac{2 \sum X_{ij} X_{ik}}{[(\sum X_{ij}^2 / N_j^2) + (\sum X_{ik}^2 / N_k^2)] N_j N_k}$$

$C_H$  = Simplified Morisita Index of Similarity

$X_{ij}, X_{ik}$  = Numbers of individuals of species I in sample j and k

$N_j = \sum X_{ij}$  = Total number of individuals in sample j

$N_k = \sum X_{ik}$  = Total number of individuals in sample k

## 2.2 Diversity Index of Birds in Forest Type A

$$H'_A = -\sum p_{Ai} \ln p_{Ai}$$

Where  $H'_A$  = Diversity Index of Birds in Forest Type A

$p_{Ai}$  = The proportion of individuals found in the  $i^{\text{th}}$  species of Forest Type A

$$E_A = \frac{H'_A}{\ln S_A}$$

$E_A$  = Evenness of Bird Diversity Index in Forest Type A

$S_A$  = Total Number of Bird Species in Forest Type A

$$\text{Var } H'_A = \frac{\sum p_{iA} (\ln p_{Ai})^2 - (\sum p_{Ai} \ln p_{Ai})^2}{N_A} + \frac{S_A - 1}{2N_A^2}$$

$\text{Var } H'_A$  = Variance of Bird Diversity Index in Forest Type A

$N_A$  = Total Number of birds present in Forest Type A

To compare diversity index between 2 Forest Types, Student's  $t$ -test was employed. The method of calculation as shown below:

$$t = \frac{H'_A - H'_B}{\sqrt{\text{Var } H'_A + \text{Var } H'_B}}$$

$$df = \frac{(\text{Var } H'_A + \text{Var } H'_B)^2}{\left[ \left( \frac{(\text{Var } H'_A)^2}{N_A} \right) + \left( \frac{(\text{Var } H'_B)^2}{N_B} \right) \right]}$$



- $t$  = Student's  $t$ -test  
 $H_A$  = Diversity index of birds in Forest Type A  
 $H_B$  = Diversity index of birds in Forest Type B  
 $\text{Var}H'_A$  = Variance of Bird Diversity Index in Forest Type A  
 $\text{Var}H'_B$  = Variance of Bird Diversity Index in Forest Type B  
 $N_A$  = Total Number of Birds present in Forest Type A  
 $N_B$  = Total Number of Birds present in Forest Type B

### 2.3 Analysis of Variance (ANOVA)

(Standard deviation of individuals) = { (standard deviation of sample means (standard error)) }  $\times \sqrt{\text{sample size}}$

$$\text{Variance} = SD^2$$

$$F = \frac{\text{Between Samples Variance}}{\text{Within Samples Variance}}$$

$$df = (n-1), (n-N)$$

$n$  = Total number of data in all data set

$N$  = Number of data set

### 2.4 Chi-square test

#### 2.4.1 Chi-square test for homogeneity ( $\chi^2$ )

$$\chi^2 = \sum \frac{(O_i - E_i)^2}{E_i}$$

$$df = n - 1$$

Where  $O_i$  = Observed Frequency in Forest Type  $i$

$E_i$  = Expected Frequency in Forest Type  $i$

$n$  = The Number of Categories

#### 2.4.2 Chi-square test for association ( $\chi^2$ )

$$\chi^2 = \sum \frac{(O_i - E_i)^2}{E_i}$$

$$E_i = \frac{C_i \times R_i}{N}$$

$$df = (R-1), (C-1)$$

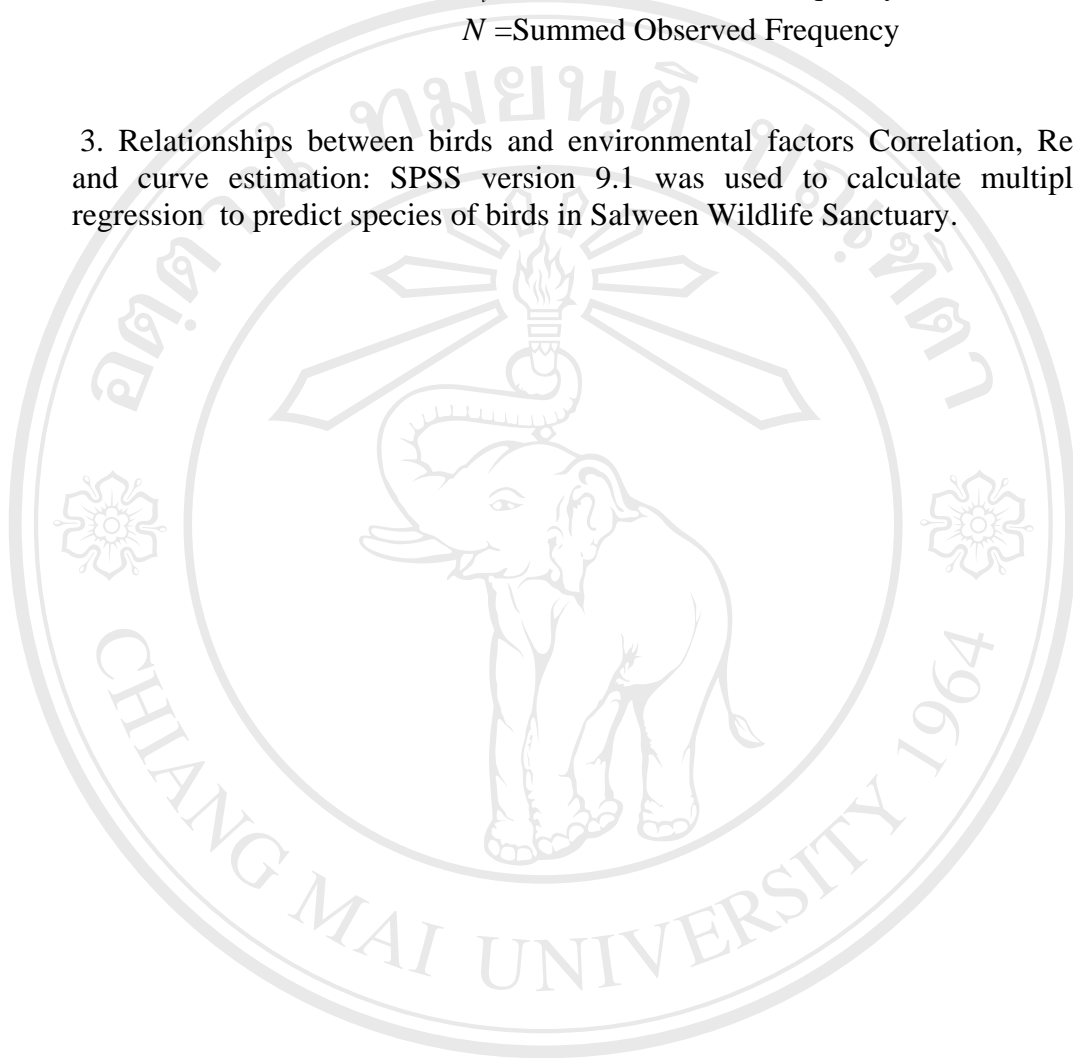
Where  $E_i$  =Expected Frequency of cell  $i$

$C_i$  =Summed Observed Frequency of Column  $i$

$R_i$  =Summed Observed Frequency of row  $i$

$N$  =Summed Observed Frequency

3. Relationships between birds and environmental factors Correlation, Regression and curve estimation: SPSS version 9.1 was used to calculate multiple linear regression to predict species of birds in Salween Wildlife Sanctuary.



ลิขสิทธิ์มหาวิทยาลัยเชียงใหม่  
 Copyright © by Chiang Mai University  
 All rights reserved

Appendix M Pictures of some birds in Salween Wildlife Sanctuary



Black Drongo  
(*Dicrurus macrocerus*)



Sooty-headed Bulbul  
(*Pycnonotus aurigaster*)



Yellow-vented Flowerpecker  
(*Dicaeum chrysorrheum*)



Great Egret  
(*Casmerodius albus*)



Collared Falconet  
(*Microhierax caerulescens*)



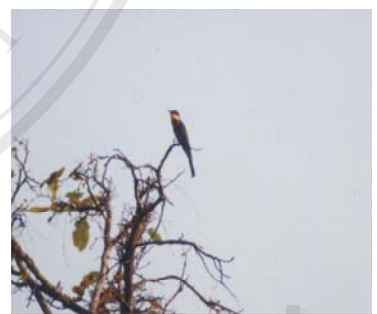
Crested Serpent Eagle  
(*Spilornis cheela*)



Coppersmith Barbet  
(*Megaliama haemacephala*)



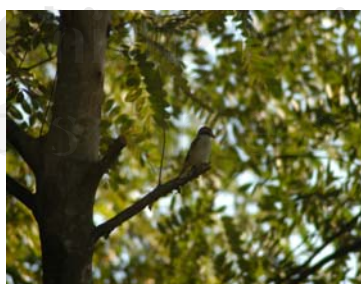
Little Spiderhunter  
(*Arachnothera longirostra*)



Chestnut-headed Bee-eater  
(*Merops leschenaulti*)



Burmese Shrike  
(*Lanius colluriooides*)



Brown Shrike  
(*Lanius cristatus*)



Crested Treewift  
(*Hemiprocne coronata*)





White-throated Kingfisher  
(*Halcyon smyrnensis*)



Purple Sunbird  
(*Nectarinia asiatica*)



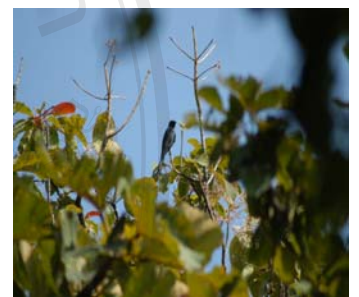
Grey Wagtail  
(*Motacilla cinerea*)



Grey-headed Parakeet  
(*Psittacula finschii*)



Common Iora  
(*Aegithina tiphia*)



Ashy Drongo  
(*Dicrurus leucophaeus*)



Common Hoopoe  
(*Upupa epop*)



Red-throated Flycatcher  
(*Ficedula parva*)



Grater-rakated tail Drongo  
(*Dicrurus paradiseus*)

## CURRICULUM VITAE

Name Kamolchai Kotcha

Date of Birth 18 February 1960 (Cholburi Province)

Home Address 199/242 Saun Non See Village, M.2, T. Nongjom, A. Sansai,  
Chiang Mai Province 50210

Education Background 1981: Certificated of Forestry from Forestry School  
Thailand.

1994: Bachelor Degree in Forestry Extension from  
Sukhothai thammathirat University Thailand

1998: Master of Science in Agriculture and Forestry  
Administration from Mae Jo University  
Thailand

### Publication

1. Kotcha, K. and Sitasuwan, N. 2005. Birds of Salween Wildlife Sanctuary, Mae Hong Song Province, during 2001-2002. *Natural History Bulletin of the Siam Society*. Vol. 53 no.2 (in press).