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ภาคผนวก ก

1. แผ่นผังแสดงการวางแนว transect line และ quadrat

     แผ่นผังแสดงการวางแนว transect line และ quadrat ต่างๆ
ในพื้นที่ป่าชายเลน อำเภอเขาสมิง จังหวัดตราด ได้แสดงรายละเอียดไว้ใน
ภาพที่ 8

2. การศึกษาพันธุ์ไม้ที่มีอยู่ในแปลงย่อยทุกแปลง

     ได้ศึกษาพันธุ์ไม้ที่มีอยู่ในแปลงย่อยทุกแปลง และเก็บข้อมูล ดังแสดง
รายละเอียดไว้ในตารางที่ 9

10m.

| 1 | 10m. | 2 | | 3 | | 12 |

5 10m. 25   45   distance, m.   225

transect line ที่ 1

500 m.

ทะเล
หรือ

ปากแม่น้ำ

| 1 | | 2 | | 3 | | 12 |

5   25   45   distance, m.   225

transect line ที่ 2

500 m.

| 1 | | 2 | | 3 | | 12 |

5   25   45   distance, m.   225
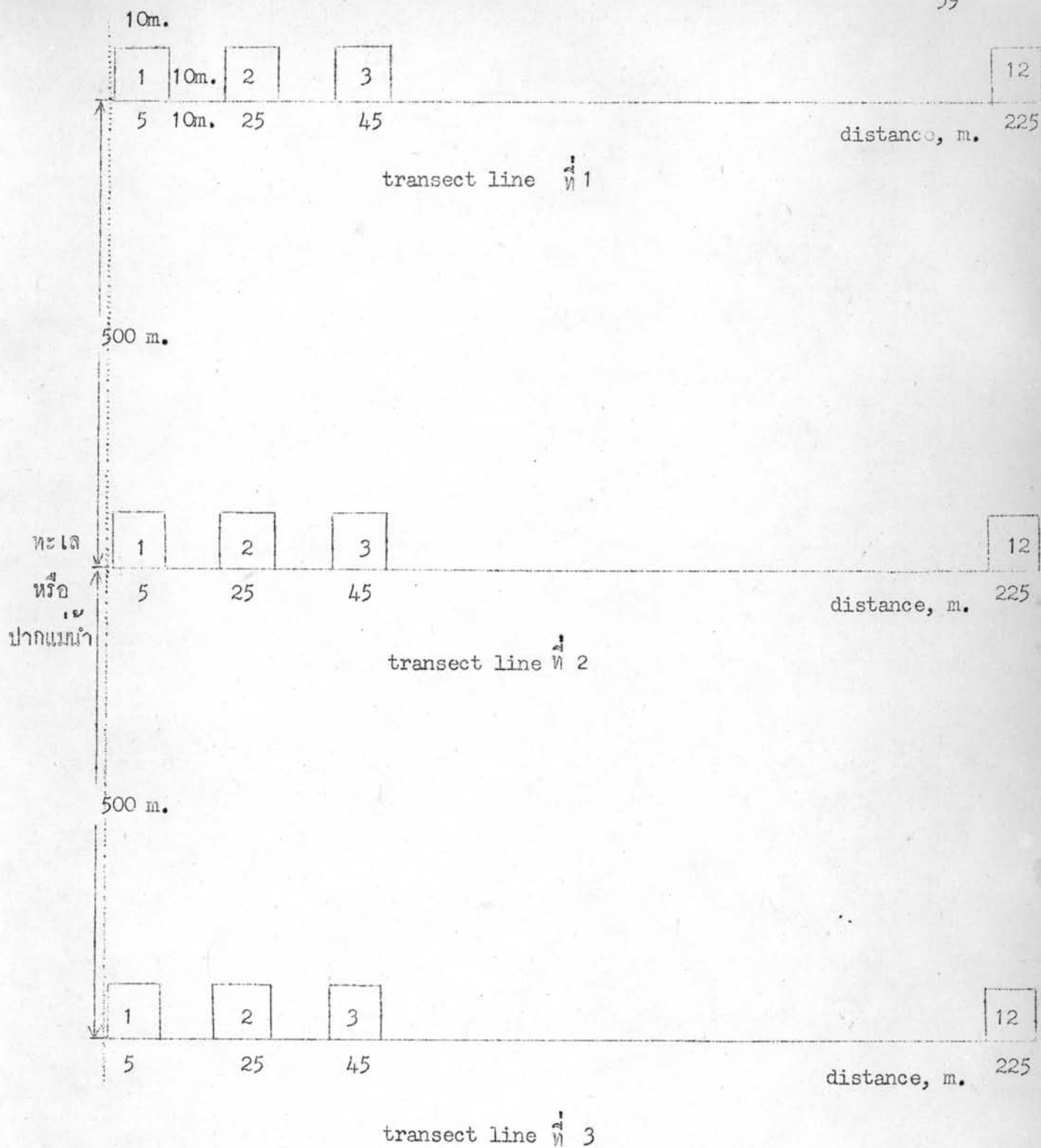
transect line ที่ 3

ภาพที่ 8 แผนผังแสดงการวางแนว transect line   และ quadrat ต่าง ๆ
ในพื้นที่ป่าชายเลน อำเภอเขาสมิง จังหวัดตราด 1, 2, 3, ...,12
คือ quadrat ที่ 1, 2, 3, ..., 12

ตารางที่ 9 แสดง จำนวน ชนิดและขนาดความสูงและความหนาแน่นของพันธุ์ไม้ป่าชายเลนที่พบอยู่ในแนว quadrat

การแนว transect line ที่ 1,2 และ 3 ของปากทะเลสาบ จังหวัดตราด

quadrat no.	distance (m)	transect line no. 1				transect line no. 2				transect line no. 3			
		species	plant no.	diameter (cm.)	height (m.)	species	plant no.	diameter (cm.)	height (m.)	species	plant no.	diameter (cm.)	height (m.)
1	5	S.caseola-ris	1	14.1	7.5	S.caseola-ris	1	6.7	4.5	S.caseola-ris	1	9.6	6.5
			2	8.6	6.5		2	6.4	5.0		2	13.1	7.1
			3	18.3	8.4		3	8.3	5.6		3	16.0	8.5
			4	17.6	8.6		4	9.6	6.1		4	14.9	7.0
			5	8.0	6.4		5	14.6	7.0		5	14.6	7.1
			—	14.2	3.0		6	12.7	7.0		6	14.3	7.0
							7	14.6	7.4		7	10.2	6.8
											8	14.9	6.8
		A. alba	1	14.3	7.5	A. alba	—	—	—	A. alba	1	15.3	7.5
			2	10.4	6.2								
2	25	S.caseola-ris	1	18.5	9.0	S.caseola-ris	1	10.2	6.2	S.caseola-ris	1	9.9	7.5
							2	15.9	7.4		2	12.7	7.5
							3	19.1	8.8		3	17.8	8.6

ตารางที่ 9 (ต่อ)

quadrat no.	distance (m.)	transect line no. 1				transect line no. 2				transect line no. 3			
		species	plant no.	diameter (cm.)	height (m.)	species	plant no.	diameter (cm.)	height (m.)	species	plant no.	diameter (cm.)	height (m.)
		A. alba	1	8.6	9.2	A.alba	1	6.4	4.6	A. alba	1	11.5	7.1
			2	7.0	5.2		2	6.7	4.7		2	12.7	7.5
			3	7.6	6.1		3	14.3	8.0		3	20.4	9.0
							4	5.7	5.0		4	15.9	9.0
							5	5.7	4.5		5	8.9	7.0
							6	6.1	5.0		6	8.6	7.0
							7	8.6	7.0		7	9.9	7.2
											8	8.3	7.0
3	45	—	—	—	—	S.caseola-ris	1	21.9	8.2	—	—	—	—
							2	17.9	8.0				
		A. alba	1	9.9	6.6	A. alba	1	9.9	6.1	A.alba	1	9.5	6.0
			2	9.9	6.5		2	11.7	7.5		2	17.9	7.8
			3	12.2	7.5		3	9.1	5.6		3	13.6	7.5
			4	12.2	7.6		4	12.6	7.5		4	20.4	8.4
			5	8.1	5.7		5	13.6	8.0		5	9.1	6.5

ตารางที่ 9 (ทอ)

quadrat no.	distance (m.)	transect line no. 1				transect line no. 2				transect line no. 3			
		species	plant no.	diameter (cm.)	height (m.)	species	plant no.	diameter (cm.)	height (m.)	species	plant no.	diameter (cm.)	height (m.)
			6	9.9	6.4		6	7.9	5.1		6	9.9	6.6
			7	8.6	5.7		7	8.6	6.5				
			8	29.9	12.1		8	9.1	6.5				
			—	—	—	R.apiculata	1	9.9	7.0	R.apiculata	1	9.1	6.0
							2	12.6	7.0		2	9.9	6.0
											3	8.1	5.8
4	65	A.alba	1	13.0	8.0	A.alba	1	8.6	6.1	A. alba	1	10.9	6.0
			2	13.2	8.5		2	10.9	7.0		2	11.8	6.2
			3	11.3	8.0		3	10.2	6.5		3	12.1	6.2
			4	16.4	8.6		4	7.0	6.0		4	7.8	5.6
			5	11.3	8.1		5	7.5	6.0		5	10.9	6.8
			6	11.8	9.0		6	10.5	6.6		6	7.5	7.1
			7	11.8	9.0		7	18.7	8.6		7	11.3	7.4
			8	11.8	10.0		8	8.6	6.0		8	14.1	8.0

พรรณไม้ 9 (กอ)

quadrat no.	distance (m.)	transect line no. 1				transect line 2				transect line 3			
		species	plant no.	diameter (cm.)	height (m.)	speices	plant no.	diameter (cm.)	height (m.)	species	plant no.	diameter (cm.)	height (m.)
			9	9.3	7.5		9	7.0	5.8		9	14.7	8.0
			10	10.2	8.0		10	7.5	7.0				
			11	10.2	8.1		11	7.0	5.5				
			12	9.8	6.5								
			13	14.0	8.5								
			14	9.3	6.0								
			15	8.9	7.1								
			16	10.5	6.6								
			17	7.5	5.5								
			18	12.5	7.9								
			19	9.3	6.5								
			20	8.9	7.8								
		R.apiculata	1	11.6	7.5	R.apiculata	1	8.6	6.5	R. apiculata	1	7.8	6.5
			2	9.8	6.5		2	7.8	6.4		2	8.6	6.5
			3	10.2	8.4		3	7.0	5.6		3	7.0	5.4

ตารางที่ 9 (ต่อ)

quadrat no.	distance (m.)	transect line no. 1 species	plant no.	diameter (cm.)	heitht (m.)	transect line no. 2 species	plant no.	diameter (cm.)	height (m.)	transect line no. 3 species	plant no.	diameter (cm.)	height (m.)
							4	7.5	5.6		4	11.8	7.5
							5	8.2	6.0		5	11.8	7.6
							6	8.6	6.5		6	8.2	7.4
							7	9.3	7.0		7	10.9	8.0
							8	10.2	7.4		8	7.0	7.2
							9	10.9	7.6		9	7.0	7.0
											10	10.2	7.6
5	85	A. alba	1	27.4	12.0								
		R.apiculata	1	11.8	8.0	R.apiculata	1	10.5	7.5	R.apiculata	1	12.1	7.7
			2	12.5	8.0		2	7.0	5.5		2	11.8	7.0
			3	11.8	7.9		3	10.2	7.0		3	14.7	8.0
			4	11.8	7.0		4	7.0	6.1		4	15.6	8.5
			5	8.2	6.1		5	7.8	6.0		5	10.2	7.0
			6	8.2	6.0		6	8.6	6.5		6	9.3	7.0

ตารางที่ 9 (ต่อ)

quadrat no.	distance (m.)	transect line no. 1				transect line no. 2				transect line no. 3			
		species	no.	plant diameter (cm.)	height (m.)	species	no.	plant diameter (cm.)	height (m.)	species	no.	plant diameter (cm.)	height (m.)
			7	8.2	6.0		7	7.8	6.0		7	9.0	6.5
			8	10.9	6.0		8	7.0	6.5		8	7.8	6.5
			9	7.0	5.6		9	10.5	7.5		9	7.0	5.6
			10	7.8	6.0		10	7.0	6.0		10	9.0	6.5
			11	9.0	7.8		11	7.5	6.0		11	12.5	7.5
			12	8.2	6.3		12	7.0	6.0		12	11.8	7.5
			13	9.8	6.5		13	7.8	7.0		13	11.8	7.8
			14	7.8	7.0		14	8.6	7.1		14	8.2	6.5
							15	10.2	7.5		15	8.6	6.5
							16	9.3	7.0		16	7.0	6.0
							17	9.0	6.5		17	10.5	7.0
							18	10.2	8.0		18	9.0	6.5
							19	10.9	7.5				
							20	11.8	8.0				
							21	12.3	7.5				
							22	10.9	7.5				

หน้าที่ 9　(๑๒)

quadrat no.	distance (m.)	transect line no. 1				transect line no. 2				transect line no. 3			
		species	plant no.	diameter (cm.)	height (m.)	species	plant no.	diameter (cm.)	height (m.)	species	plant no.	diameter (cm.)	height (m.)
6	105	R.apiculata	1	7.8	6.5	R.apiculata	1	12.2	7.5	R.apiculata	1	11.4	7.2
			2	7.8	6.5		2	11.8	7.5		2	13.1	7.5
			3	10.0	7.6		3	8.3	6.5		3	13.5	7.0
			4	10.0	7.5		4	8.8	6.5		4	12.2	7.0
			5	10.4	7.5		5	9.6	6.6		5	8.8	6.5
			6	9.2	6.5		6	9.2	6.1		6	7.8	6.5
			7	9.6	7.5		7	10.0	6.5		7	12.6	7.0
			8	7.8	6.0		8	8.3	6.5		8	11.4	7.0
			9	11.8	8.0		9	7.8	6.0		9	10.9	6.9
			10	9.6	6.1		10	8.8	6.0		10	7.8	6.5
			11	8.3	6.0		11	7.8	5.6		11	12.2	7.0
			12	11.8	7.5		12	12.2	7.0		12	12.6	7.1
			13	11.8	8.0		13	7.8	6.0		13	13.1	8.0
			14	8.8	6.0		14	9.6	6.8		14	10.0	6.9
			15	10.0	7.4		15	8.8	6.7		15	7.8	6.8

quadrat no.	distance (m.)	transect line no. 1 species	plant no.	diameter (cm.)	height (m.)	transect line no. 2 species	plant no.	diameter (cm.)	height (m.)	transect line no. 3 species	plant no.	diameter (cm.)	height (m.)
			16	9.6	7.5		16	10.4	7.0				
			17	8.3	6.5		17	10.0	7.0				
			18	11.4	7.6		18	9.2	7.0				
			19	9.6	6.0		19	8.8	7.0				
			20	8.8	5.0		20	9.6	7.1				
			21	10.9	7.0		21	9.2	7.0				
		—	—	—	—	B. gymnor-rhiza	1	7.8	6.0	B. gymnor-rhiza	1	8.8	6.5
		—	—	—	—	B. sexangula	1	7.8	6.1	—	—	—	—
		—	—	—	—	—	—	—	—	X. obovatus	1	11.4	7.0
		—	—	—	—	—	—	—	—		2	8.8	6.6
		—	—	—	—	—	—	—	—	X. moluccen-sis	1	7.8	6.5

ตารางที่ 9 (ต่อ)

quadrat no.	distance (m.)	species		transect line no. 1			transect line no. 2			transect line no. 3	
			no.	plant diameter (cm.)	height (m.)	no.	plant diameter (cm.)	height (m.)	no.	plant diameter (cm.)	height (m.)
7	125	R.apiculata	1	11.8	9.0	1	10.5	8.0	1	9.8	7.0
			2	10.5	9.0	2	7.0	6.0	2	7.8	7.0
			3	9.0	9.0	3	7.8	6.5	3	7.5	6.5
			4	9.0	9.0	4	7.5	6.5	4	7.5	6.5
			5	8.2	8.8	5	7.5	6.0	5	7.5	6.5
			6	8.6	9.0	6	7.0	6.5	6	7.0	6.5
			7	11.8	9.0	7	7.8	6.6	7	8.2	7.0
			8	8.2	9.0	8	9.0	7.0	8	8.6	7.2
			9	9.0	9.0	9	9.3	8.0	9	11.8	8.0
			10	10.2	9.0	10	7.5	7.5	10	11.2	8.0
			11	11.8	9.1	11	8.2	7.5	11	12.1	8.0
			12	8.2	9.0	12	8.6	7.6	12	10.9	8.0
			13	10.5	9.0	13	7.8	7.0	13	10.5	8.0
			14	12.5	9.0	14	10.2	8.0	14	10.2	7.6
			15	9.3	8.0	15	9.8	8.5	15	9.0	7.5
			16	7.0	7.2	16	11.2	9.5	16	9.3	7.5
			17	7.5	8.0	17	11.8	9.5	17	12.1	8.5

ตารางที่ 9   (๑๒)

quadrat no.	distance (m.)	transect line no. 1 species	no.	plant diameter (cm.)	height (m.)	transect line no. 2 species	no.	plant diameter (cm.)	height (m.)	transect line no. 3 species	no.	plant diameter (cm.)	height (m.)
			18	10.2	7.5		18	10.9	8.5		18	11.8	8.5
			19	10.5	7.5		19	10.9	8.5		19	7.8	7.5
			20	10.5	8.0		20	12.5	9.4		20	7.0	6.5
			21	8.2	7.0						21	7.5	7.0
			22	10.9	8.0						22	7.8	7.0
			23	15.2	9.6						23	8.2	7.2
			24	8.2	7.0						24	9.0	7.4
			25	7.8	6.6								
			26	7.8	7.8								
			27	8.6	8.0								
			28	9.8	8.1								
			29	8.6	8.0								
			30	9.8	8.0								
			31	11.2	9.0								
			32	9.8	8.0								
			33	7.5	8.0								
			34	8.6	8.5								

ตารางที่ 9 (ต่อ)

quadrat no.	distance (m.)	transect line no. 1				transect line no. 2				transect line no. 3			
		species	plant no.	diameter (cm.)	height (m.)	species	plant no.	diameter (cm.)	height (m.)	species	plant no.	diameter (cm.)	height (m.)
		—	—	—	—	B.gymnor-rhiza	1	10.9	9.0	B.gymnor-rhiza	1	12.5	7.8
							2	9.3	8.0		2	11.8	7.5
											3	7.0	6.5
		—	—	—	—	B.sexangula	1	8.2	7.5	B.sexangula	1	8.2	7.0
8	145	R.apiculata	1	8.2	8.5	R.apiculata	1	7.0	7.0	R.apiculata	1	7.8	8.5
			2	8.2	7.5		2	7.5	7.2		2	8.2	7.5
			3	7.8	7.0		3	7.8	7.2		3	7.8	7.5
			4	9.3	8.0		4	7.8	7.0		4	7.0	7.0
			5	10.0	9.0		5	7.0	6.5		5	10.5	8.0
			6	9.0	8.0		6	7.0	6.5		6	10.2	7.5
			7	9.0	9.0		7	8.2	7.5		7	9.0	7.5
			8	10.9	9.0		8	9.0	7.5		8	9.8	7.5
			9	9.3	9.0		9	10.9	8.0		9	8.6	7.5

quadrat no.	distance (m.)	transect line no. 1				transect line no. 2				transect line no. 3			
		species	plant no.	diameter (cm.)	height (m.)	species	plant no.	diameter (cm.)	height (m.)	species	plant no.	diameter (cm.)	height (m.)
			10	10.2	9.1		10	10.2	8.0		10	7.0	7.0
			11	7.0	7.5		11	7.5	7.5		11	9.3	7.5
			12	10.2	9.0		12	10.5	8.0		12	7.8	7.5
			13	10.9	9.0		13	10.2	8.0		13	11.8	8.0
			14	10.5	9.0		14	7.0	6.0		14	11.3	8.0
			15	10.5	9.0		15	8.6	8.0		15	10.2	8.0
			16	10.2	8.5		16	8.2	8.0		16	11.8	8.2
			17	10.2	8.5		17	10.2	8.5		17	14.5	9.0
			18	9.0	8.5		18	9.3	8.5		18	14.1	9.0
			19	8.6	8.5		19	8.6	8.5		19	11.8	8.5
			20	7.8	8.5		20	10.2	9.0		20	13.2	9.0
			21	7.5	8.5		21	12.1	9.0				
			22	8.2	8.5								
			23	8.2	8.5								

quadrat no.	distance (m.)	transect line no. 1				transect line no. 2				transect line no. 3			
		species	plant no.	diameter (cm.)	height (m.)	species	plant no.	diameter (cm.)	height (m.)	species	plant no.	diameter (cm.)	height (m.)
		—	—	—	—	—	—	—	—	R.mucronata	1	7.0	7.0
											2	7.5	7.0
											3	8.6	7.6
											4	7.8	7.0
											5	7.0	6.5
											6	9.0	8.0
											7	10.9	8.5
											8	7.8	8.0
											9	12.1	9.0
											10	11.8	9.0
											11	11.2	8.5
											12	10.5	8.0
											13	8.2	7.5
											14	8.2	8.0
											15	11.8	8.0
											16	10.9	8.0

ตารางที่ 9 (ต่อ)

quadrat no.	distance (m.)	transect line no. 1 species	plant no.	diameter (cm.)	height (m.)	transect line no. 2 species	plant no.	diameter (cm.)	height (m.)	transect line no. 3 species	plant no.	diameter (cm.)	height (m.)
											17	10.2	8.0
											18	9.8	7.5
											19	8.2	7.0
											20	9.0	7.5
											21	8.2	7.0
											22	8.6	7.5
											23	11.8	8.5
											24	12.1	8.5
		B.gymnor-rhiza	—	—	—	B.gymnor-rhiza	1	7.0	5.6	B.gymnor-rhiza	1	11.8	8.5
							2	7.8	8.5		2	10.9	8.5
							3	10.2	7.0		3	10.2	8.0
		B.sexan-gula	—	—	—	B.sexan-gula	1	7.5	5.5	B.sexan-gula	1	7.0	7.5
							2	7.8	6.1		2	7.5	7.5

ตารางที่ 9 (ต่อ)

quadrat no.	distance (m.)	transect line no. 1				transect line no. 2				transect line no. 3			
		species	plant no.	diameter (cm.)	height (m.)	species	plant no.	diameter (cm.)	height (m.)	species	plant no.	diameter (cm.)	height (m.)
9	165						3	9.3	6.5		3	7.8	7.5
							4	10.2	6.6		4	9.0	8.0
											5	11.3	8.5
			—	—	—	X.obovatus	1	7.0	5.5	X.obovatus	1	12.1	8.5
			—	—	—		2	8.6	6.2				
							—	—	—	X.moluccensis	1	11.5	8.5
		R.apiculata	1	8.6	7.0	R.apiculata	1	7.8	7.5	R.apiculata	1	7.5	6.5
			2	10.5	7.0		2	8.2	7.5		2	10.9	7.5
			3	10.2	7.1		3	7.8	7.5		3	7.0	6.5
			4	9.0	6.5		4	7.5	7.0		4	7.0	6.5
			5	8.6	6.6		5	10.5	8.0		5	7.5	6.7
			6	10.2	5.8		6	10.2	8.0		6	7.8	7.0
			7	9.3	7.0		7	9.0	7.6		7	8.2	7.1

ตาราง ๙ (๑๒)

quadrat no.	distance (m.)	transect line no.1 species	plant no.	diameter (cm.)	height (m.)	transect line no. 2 species	plant no.	diameter (cm.)	height (m.)	transect line no. 3 species	plant no.	diameter (cm.)	height (m.)
			8	8.2	6.0		8	9.8	7.8		8	7.8	7.0
			9	9.3	7.2		9	8.6	7.5		9	10.9	8.0
			10	9.3	7.0		10	7.5	7.0		10	10.2	8.0
			11	11.8	8.5		11	7.5	7.5		11	9.8	7.5
			12	10.2	8.0		12	10.5	8.0		12	11.2	8.5
			13	10.9	8.2		13	10.2	8.0		13	10.5	8.5
			14	9.3	7.0		14	7.0	6.0		14	10.9	8.4
			15	8.6	8.0		15	8.6	8.0		15	9.0	7.5
			16	8.6	6.6		16	8.2	8.0		16	11.8	8.5
			17	8.2	6.5		17	10.2	8.5		17	11.2	8.5
			18	9.3	7.0		18	9.3	8.4				
			19	8.2	5.8		19	7.8	7.5				
		B. gymnor-rhiza	1	7.8	5.6	B. gymnor-rhiza	1	7.8	5.5	B. gymnor-rhiza	1	10.2	7.5
							2	8.2	5.6		2	9.8	7.4
							3	10.9	6.1		3	9.0	7.0
							4	11.2	6.5		4	7.8	7.0

ตาราง 9   (๑๒)

quadrat no.	distance (m.)	transect line no. 1 species	plant no.	diameter (cm.)	height (m.)	transect line no. 2 species	plant no.	diameter (cm.)	height (m.)	transect no. 3 species	plant no.	diameter (cm.)	height (m.)
10	185	B.sexangula	1	9.0	5.8	B.sexangula	1	7.0	5.2	B.sexangula	1	9.0	7.0
							2	7.8	5.5		2	9.0	7.1
							3	8.6	5.8		3	10.2	7.2
							4	10.2	6.4		4	10.5	7.5
							5	7.5	5.5		5	9.3	7.0
		X.obovatus	—	—	—	X.obovatus	1	8.2	7.0	X.obovatus	1	10.9	8.0
							2	9.3	7.5		2	10.2	8.0
			—	—	—		—	—	—	X.moluccensis	1	9.0	7.5
											2	8.2	7.0
		R.apiculata	1	9.3	7.0	R.apiculata	1	10.5	8.5	R.apiculata	1	7.0	6.5
			2	10.5	7.0		2	8.2	7.0		2	7.5	7.0
			3	11.2	7.0		3	11.8	9.0		3	7.0	7.0
			4	11.8	9.0		4	8.6	7.6		4	8.6	7.5
			5	7.0	5.1		5	8.2	7.5		5	10.9	7.8

ตารางที่ 9 (๑๒)

quadrat no.	distance (m.)	transect line no. 1				transect line no. 2				transect line no. 3			
		species	plant no.	diameter (cm.)	height (m.)	species	plant no.	diameter (cm.)	height (m.)	species	plant no.	diameter (cm.)	height (m.)
			6	10.2	8.0		6	7.0	6.0		6	7.8	7.1
			7	7.5	7.5		7	7.5	6.0		7	8.2	7.2
			8	9.0	8.0		8	9.0	7.2		8	8.6	7.0
			9	10.2	7.8		9	8.2	7.0		9	9.0	7.2
			10	8.6	6.8		10	10.5	8.5		10	9.8	7.6
			11	9.0	7.0		11	7.0	5.6		11	11.8	8.0
			12	9.0	7.0		12	7.0	6.0		12	11.2	8.0
			13	7.0	5.6		13	10.2	8.5		13	14.1	8.9
			14	8.2	8.5		14	10.5	8.5		14	14.8	9.0
			15	8.2	9.0						15	14.5	8.5
			16	9.0	9.0						16	15.6	9.2
			17	8.2	9.0						17	12.9	8.8
			18	8.2	9.0									
			19	7.8	8.0									
			20	8.2	9.0									
			21	8.2	9.0									

ตารางที่ 9 (๑๒)

quadrat no.	distance (m.)	transect line no. 1 species	plant no.	diameter (cm.)	height (m.)	transect line no. 2 species	plant no.	diameter (cm.)	height (m.)	transect line no. 3 species	plant no.	diameter (cm.)	height (m.)
			22	10.5	9.0								
			23	7.8	9.0								
			24	8.6	8.5								
			25	10.5	9.0								
			26	7.0	8.0								
			27	9.3	8.0								
			28	7.5	5.6								
			29	8.6	8.0								
		B.gymnor-rhiza	1	10.5	6.6	B.gymnor-rhiza	1	10.9	8.0	B.gymnor-rhiza	1	8.2	7.0
							2	9.3	7.5		2	7.8	7.0
							3	7.0	7.0		3	11.8	7.5
											4	10.9	7.5
			—	—	—	B.sexangula	1	11.2	7.5	B.sexangula	1	9.0	7.2
							2	8.2	6.5		2	8.2	7.0

ตารางที่ 9 (ต่อ)

quadrat no.	distance (m.)	transect line no. 1				transect line no. 2				transect line no. 2			
		species	plant no.	diameter (cm.)	height (m.)	species	plant no.	diameter (cm.)	height (m.)	species	plant no.	diameter (cm.)	height (m.)
							3	7.0	6.5		3	11.8	8.0
							4	8.2	6.5		4	10.9	7.5
							5	7.8	7.0		5	11.2	8.0
							6	7.0	6.5				
							7	7.5	7.0				
							8	9.0	8.0				
							9	8.2	7.5				
							10	10.5	8.5				
							11	10.2	8.0				
							12	7.0	7.0				
							13	7.0	7.0				
							14	7.8	7.5				
							15	10.9	8.5				
							16	10.5	8.5				
							17	7.0	7.0				
							18	8.2	7.2				

quadrat no.	distance (m.)	transect line no. 1 species	plant no.	diameter (cm.)	height (m.)
		X.moluccen-sis	—	—	—
			1	9.8	7.5
11	205	R.apiculata	1	10.2	9.5
			2	9.0	6.5
			3	7.5	6.0
			4	10.2	8.0
			5	7.0	6.0
			6	7.8	6.5
			7	9.0	6.8
			8	8.2	6.5
			9	10.2	8.5

transect line no. 2 species	plant no.	diameter (cm.)	height (m.)
X.obovatus	1	9.3	8.5
X.moluccen-sis	1	7.8	8.0
R.apiculata	1	7.8	7.5
	2	7.0	7.5
	3	10.5	8.0
	4	10.9	8.1
	5	9.0	8.0
	6	10.5	8.5
	7	7.5	8.0
	8	10.2	8.4

transect line no. 3 species	plant no.	diameter (cm.)	height (m.)
X.obovatus	1	15.6	8.0
	2	14.8	8.0
X.moluccen-sis	1	11.2	7.5
	2	12.9	8.0
R.apiculata	1	8.2	7.1
	2	7.8	7.0
	3	9.0	7.5
	4	10.2	8.0
	5	10.5	8.0
	6	9.3	7.8
	7	10.9	8.0
	8	13.2	8.5
	9	14.1	9.2

ตารางที่ 9 (๓๒)

quadrat no.	distance (cm.)	transect line no. 1 species	no.	diameter (cm.)	height (m.)	transect line no. 2 species	no.	diameter (cm.)	height (m.)	transect line no. 3 species	no.	diameter (cm.)	height (m.)
			10	10.2	7.7						10	14.8	9.5
			11	8.2	6.0						11	12.9	8.7
			12	7.0	6.0								
			13	7.0	6.0								
			14	7.5	6.3								
			15	10.2	8.0								
			16	8.6	6.6								
		B. gymnor-rhiza	1	10.2	8.5	B.gymnor-rhiza	1	7.8	7.5	B. gymnor-rhiza	1	11.8	8.2
			2	7.0	6.2		2	7.0	7.5		2	12.5	8.9
			3	9.8	8.5		3	10.5	8.0		3	10.9	8.0
			4	8.2	8.5		4	10.9	8.2		4	10.2	8.0
			5	9.3	8.6		5	9.0	8.0		5	10.9	8.3
							6	10.5	8.5		6	11.2	8.5
							7	7.5	8.0		7	9.0	7.1

ตารางที่ 9 (๑๒)

transect line no. 1

species	plant no.	diameter (cm.)	height (m.)
B.sexangula	1	9.8	8.5
	2	10.9	8.6
	3	7.6	6.0
X.obovatus	1	7.8	5.5
X.moluccensis	1	14.1	7.0
	2	18.0	8.1

transect line no. 2

species	plant no.	diameter (cm.)	height (m.)
B.sexangula	1	9.0	7.2
	2	7.5	6.5
	3	7.0	6.5
	4	10.9	7.8
	5	10.5	7.5
	6	10.5	7.5
	7	8.2	7.0
	8	9.0	7.3
X.obovatus	1	11.2	9.0
	2	7.8	8.0
	3	7.0	8.0
X.moluccensis	1	10.9	9.0
	2	9.0	8.5

transect line no. 3

species	plant no.	diameter (cm.)	height (m.)
B.sexangula	1	11.8	8.0
	2	10.9	7.5
	3	11.2	7.8
	4	12.9	8.5
	5	12.1	8.0
	6	10.2	7.5
	7	9.0	7.5
	8	9.3	7.5

ตารางที่ 9 (๑๒)

quadrat no.	distance (m.)	transect line no.1				transect line no. 2				transect line no. 3			
		species	plant no.	diameter (cm.)	height (m.)	species	plant no.	diameter (cm.)	height (m.)	species	plant no.	diameter (cm.)	height (m.)
12	225	R.apiculata	1	8.6	8.0	R.apiculata	1	10.9	8.5	R.apiculata	1	7.0	7.0
			2	8.2	8.0		2	10.2	8.0		2	10.9	7.5
			3	7.0	7.4		3	9.0	6.5		3	10.2	7.4
							4	7.0	6.0		4	10.5	7.5
							5	7.8	7.0		5	13.2	8.5
											6	14.1	8.7
											7	10.3	7.8
											8	10.9	8.0
											9	12.1	8.0
		B.gymnor-rhiza	1	7.0	6.0	B.gymnor-rhiza	1	10.9	8.5	B.gymnor-rhiza	1	12.5	8.0
			2	9.8	6.5		2	10.5	8.0		2	12.1	8.0
			3	10.9	8.0		3	7.8	7.0		3	8.6	7.0
							4	7.0	6.8		4	9.0	7.2
							5	8.2	7.6		5	13.2	8.5

ตารางที่ 9 (๑๐)

transect line no. 1

quadrat distance (m.)	species	plant no.	diameter (cm.)	height (m.)
	B.sexangula	1	7.8	5.1
		2	8.6	7.8
		3	10.9	8.0
		4	9.8	7.5
		5	9.8	7.6
		6	7.8	6.4
		7	8.6	7.0

transect line no. 2

species	plant no.	diameter (cm.)	height (m.)
	6	7.5	6.0
	7	9.3	6.5
	8	9.8	7.0
	9	9.0	7.4
B.sexangula	1	7.0	6.0
	2	9.0	7.0
	3	8.2	6.5
	4	8.6	6.5
	5	10.9	7.0

transect line no. 3

species	plant no.	diameter (cm.)	height (m.)
	6	11.8	8.4
	7	10.9	7.5
	8	8.2	7.5
	9	9.3	7.6
	10	10.9	7.5
	11	11.8	8.0
	12	7.0	7.0
	13	7.5	7.1
B.sexangula	1	10.9	8.0
	2	10.2	8.0
	3	9.3	7.4
	4	7.5	7.0
	5	7.8	7.1
	6	7.0	6.8
	7	11.2	8.0

quadrat no.	distance (m.)	transect line no. 1 species	plant no.	diameter (cm.)	height (m.)	transect line no. 2 species	plant no.	diameter (cm.)	height (m.)	transect line no. 3 species	plant no.	diameter (cm.)	height (m.)
			8	8.2	6.5						8	13.7	8.8
											9	14.5	9.0
											10	14.9	9.0
		X.obovatus	1	10.9	8.5	X.obovatus	1	11.8	7.0	X.obovatus	1	13.2	8.0
			2	10.2	8.4		2	12.5	7.5		2	14.9	8.6
			3	9.0	8.5		3	10.2	7.5		3	15.2	8.5
							4	7.8	6.6		4	14.1	8.4
											5	10.9	7.5
											6	11.8	7.7
		X.moluccensis	1	7.8	8.0	X.moluccensis	1	8.2	6.0	X.moluccensis	1	14.5	8.5
			2	8.2	8.0		2	10.9	7.4		2	12.5	8.4
			3	9.8	8.6		3	10.9	7.6		3	11.8	8.0
			4	11.8	9.0		4	7.8	6.6		4	8.2	7.1
							5	10.2	7.0		5	10.2	7.8

quadrat no.	distance (m.)	transect line no. 1				transect line no. 2				transect line no. 3			
		species	plant no.	diameter (cm.)	height (m.)	species	plant no.	diameter (cm.)	height (m.)	species	plant no.	diameter (cm.)	height (m.)
		C. tagal	1	10.5	8.5	C. tagal	1	8.2	7.0	—	—	—	—
			2	8.6	8.0		2	7.8	7.0				

การคำนวณหาค่า Relative density, Relative frequency, Relative dominance และ Importance value ของพันธุ์ไม้ตามระยะทางๆ ห่างจากขอบป่าเข้าสู่พื้นดินในป่า

จากสูตร :

Relative density $= \dfrac{\text{No. of individual of species X}}{\text{Total of individual of all species}} \times 100$

Relative frequency $= \dfrac{\text{Frequency of species X}}{\text{Sum of frequency values for all species}} \times 100$

Relative dominance $= \dfrac{\text{Basal area of species X}}{\text{Total basal area of all species}} \times 100$

โดยที่ : Basal area $= \pi r^2$ โดย r แทนรัศมีของต้นไม้

Importance value $=$ Relative density + Relative frequency + Relative dominance

ดังนั้นที่ระยะ 5 เมตรห่างจากขอบป่าเข้าสู่พื้นดินในป่า ได้ใช้ข้อมูลใน quadrat ที่ 1 จาก transect line ที่ 1, 2 และ 3 ซึ่งแสดงรายละเอียด ไว้ในตารางที่ 9 มาคำนวณหาค่าต่างๆ ดังนี้

Relative density ของ Sonneratia caseolaris $= \dfrac{21 \times 100}{24}$ %

$= 87.5$ %

Relative density ของ Avicennia alba $= \dfrac{3 \times 100}{24}$ %

$= 12.5$ %

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Relative frequency ของ <u>Sonneratia caseolaris</u> = $\frac{3}{5}$ X 100 %

= 60 %

Relative frequency ของ <u>Avicennia alba</u> = $\frac{2}{5}$ X 100 %

= 4C %

Relative dominance ของ <u>Sonneratia caseolaris</u> = $\frac{0.277}{0.320}$ X 100 %

= 86.6 %

Relative dominance ของ<u>Avicennia alba</u> = $\frac{0.043}{0.320}$ X 100 %

= 13.4 %

Importance value ของ <u>Sonneratia caseolaris</u> = 87.5 + 60 + 86.6

= 234.1

Importance value ของ <u>Avicennia alba</u> = 12.5 + 40 + 13.4

= 65.9

    ในทำนองเดียวกัน ที่ระยะ 25 45 65 ..... จนถึง 225 เมตร ห่างจาก
ขอบป่าเข้าไปสู่พื้นดินในป่า จะคำนวณหาค่า relative density, relative frequency,
relative dominance และ importance value ของพันธุ์ไม้ โดยวิธีเดียว
กับตัวอย่างที่แสดงไว้

ประวัติผู้เขียน

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2515   ขณะนี้รับราชการอยู่ในภาควิชาพฤกษศาสตร์ คณะวิทยาศาสตร์ จุฬาลงกรณมหาวิทยาลัย
ในตำแหน่งอาจารย์ระดับ 4