

# Appendix 5B

## Benthic Infauna

## Species List

Species list of macrobenthic animals collected from wet and dry season surveys

(B = both seasons; D = dry season; W = wet season)

Phylum	Class	Order	Family	Species	
Nemertinea				Nemertean spp.	B
Annelida	Polychaeta	Amphinomida	Amphinomidae	<i>Chloeia flava</i>	W
Annelida	Polychaeta	Amphinomida	Amphinomidae	<i>Linopherus paucibranchiata</i>	B
Annelida	Polychaeta	Capitellida	Capitellidae	<i>Capitella</i> sp.	B
Annelida	Polychaeta	Capitellida	Capitellidae	<i>Mediomastus</i> sp.	B
Annelida	Polychaeta	Capitellida	Capitellidae	<i>Notomastus</i> sp.	B
Annelida	Polychaeta	Capitellida	Maldanidae	<i>Euclymene</i> sp.	B
Annelida	Polychaeta	Cossurida	Cossuridae	<i>Cossurella dimorpha</i>	B
Annelida	Polychaeta	Eunicida	Dorvilleidae	<i>Schistomeringos rudolphi</i>	D

Annelida	Polychaeta	Eunicida	Eunicidae	<i>Eunice indica</i>	B
Annelida	Polychaeta	Eunicida	Eunicidae	<i>Marphysa sanguinea</i>	B
Annelida	Polychaeta	Eunicida	Eunicidae	<i>Marphysa stragulum</i>	B
Annelida	Polychaeta	Eunicida	Lumbrineriidae	<i>Lumbrineris naga</i>	B
Annelida	Polychaeta	Eunicida	Lumbrineriidae	<i>Lumbrineris shiinoi</i>	B
Annelida	Polychaeta	Eunicida	Onuphidae	<i>Onuphis eremita</i>	B
Annelida	Polychaeta	Opheliida	Opheliidae	<i>Ophelina acuminata</i>	B
Annelida	Polychaeta	Opheliida	Scalibregmidae	<i>Scalibregma inflatum</i>	B
Annelida	Polychaeta	Orbiniida	Orbiniidae	<i>Phylo ornatus</i>	B
Annelida	Polychaeta	Orbiniida	Paraonidae	<i>Paraonella</i> sp.	B
Annelida	Polychaeta	Phyllodocida	Chrysopetalidae	<i>Bhawania brevis</i>	B
Annelida	Polychaeta	Phyllodocida	Glyceridae	<i>Glycera chirori</i>	B
Annelida	Polychaeta	Phyllodocida	Goniadidae	<i>Glycinde gurjanovae</i>	B

Annelida	Polychaeta	Phyllodocida	Hesionedae	<i>Ophiodromus angutifrons</i>	B
Annelida	Polychaeta	Phyllodocida	Hesionedae	<i>Ophiodromus obscura</i>	W
Annelida	Polychaeta	Phyllodocida	Lacydoniidae	<i>Paralacydonia paradoxa</i>	B
Annelida	Polychaeta	Phyllodocida	Nephtyidae	<i>Aglaophamus dibranchis</i>	B
Annelida	Polychaeta	Phyllodocida	Nephtyidae	<i>Aglaophamus sinensis</i>	B
Annelida	Polychaeta	Phyllodocida	Nereidae	<i>Leonnates persica</i>	B
Annelida	Polychaeta	Phyllodocida	Nereidae	<i>Nectoneanthes alatopalpis</i>	B
Annelida	Polychaeta	Phyllodocida	Phyllodocidae	<i>Phyllodoce</i> sp.	B
Annelida	Polychaeta	Phyllodocida	Pilargiidae	<i>Otopsis</i> sp.	B
Annelida	Polychaeta	Phyllodocida	Pilargiidae	<i>Sigambra hanaokai</i>	B
Annelida	Polychaeta	Phyllodocida	Polynoidae	<i>Gattyana</i> sp.	W
Annelida	Polychaeta	Phyllodocida	Polynoidae	<i>Harmothoe</i> sp.	B
Annelida	Polychaeta	Phyllodocida	Polynoidae	<i>Lepidasthenia</i> sp.	B

Annelida	Polychaeta	Phyllodocida	Sigalionidae	<i>Ehlersileanira hwanghaiensis</i>	B
Annelida	Polychaeta	Sabellida	Sabellidae	<i>Laonome indica</i>	D
Annelida	Polychaeta	Spionida	Cirratulidae	<i>Cirriformia</i> sp.	B
Annelida	Polychaeta	Spionida	Cirratulidae	<i>Tharyx</i> sp.	B
Annelida	Polychaeta	Spionida	Magelonidae	<i>Magelona</i> sp.	B
Annelida	Polychaeta	Spionida	Poecilochaetidae	<i>Poecilochaetus hystricosus</i>	B
Annelida	Polychaeta	Spionida	Spionidae	<i>Laonice cirrata</i>	B
Annelida	Polychaeta	Spionida	Spionidae	<i>Minuspio cirrifera</i>	W
Annelida	Polychaeta	Spionida	Spionidae	<i>Parapriospio pinnata</i>	B
Annelida	Polychaeta	Spionida	Spionidae	<i>Polydora</i> sp.	W
Annelida	Polychaeta	Spionida	Spionidae	<i>Prionospio malmgreni</i>	B
Annelida	Polychaeta	Spionida	Spionidae	<i>Prionospio saccifera</i>	B
Annelida	Polychaeta	Spionida	Spionidae	<i>Rhynchospio</i> sp.	W

Annelida	Polychaeta	Spionida	Spionidae	<i>Scolelepis squamata</i>	B
Annelida	Polychaeta	Spionida	Trochochaetidae	<i>Trochochaeta diverapoda</i>	B
Annelida	Polychaeta	Sternaspida	Sternaspidae	<i>Sternaspis scutata</i>	B
Annelida	Polychaeta	Terebellida	Ampharetidae	<i>Anobothrus</i> sp.	B
Annelida	Polychaeta	Terebellida	Terebellidae	<i>Amaeana</i> sp.	B
Annelida	Polychaeta	Terebellida	Terebellidae	<i>Loimia bandera</i>	B
Annelida	Polychaeta	Terebellida	Terebellidae	<i>Loimia ingens</i>	B
Annelida	Polychaeta	Terebellida	Trichobranchidae	<i>Terebellides stroemii</i>	D
Sipuncula	Phascolosomatidea	Phascolosomaliformes	Phascolosomatidae	<i>Apionsoma trichocephalus</i>	B
Echiura	Echiurida	Echiuroinea	Echiuridae	<i>Thalassema sabinum</i>	D

Mollusca	Bivalvia	Arcoida	Arcidae	<i>Mabellarca consociata</i>	W
Mollusca	Bivalvia	Lucinoida	Lucinidae	<i>Anodontia stearnsiana</i>	D
Mollusca	Bivalvia	Myoida	Corbulidae	<i>Solidicorbula tunicata</i>	B
Mollusca	Bivalvia	Veneroida	Mactridae	<i>Mactrinula dolabrata</i>	D
Mollusca	Bivalvia	Veneroida	Mactridae	<i>Mactrinula reevesii</i>	D
Mollusca	Bivalvia	Veneroida	Tellinidae	<i>Angulus emarginatus</i>	W
Mollusca	Bivalvia	Veneroida	Tellinidae	<i>Macoma incongrua</i>	D
Mollusca	Bivalvia	Veneroida	Tellinidae	<i>Macoma praerupta</i>	B
Mollusca	Bivalvia	Veneroida	Tellinidae	<i>Nitidotellina iridella</i>	W
Mollusca	Bivalvia	Veneroida	Tellinidae	<i>Nitidotellina minuta</i>	B
Mollusca	Bivalvia	Veneroida	Veneridae	<i>Dosinia derupta</i>	W
Mollusca	Bivalvia	Veneroida	Veneridae	<i>Timoclea lionota</i>	W
Mollusca	Gastropoda	Mesogastropoda	Naticidae	<i>Polinices mammata</i>	W

Arthropoda	Malacostraca	Amphipoda		Amphipod spp.	B
Arthropoda	Malacostraca	Copepoda		Copepod spp.	B
Arthropoda	Malacostraca	Decapoda	Alpheidae	<i>Alpheus brevicristatus</i>	B
Arthropoda	Malacostraca	Decapoda	Alpheidae	<i>Alpheus distinguendus</i>	B
Arthropoda	Malacostraca	Decapoda	Callinassidae	<i>Callinassa japonica</i>	B
Arthropoda	Malacostraca	Decapoda	Goneplacidae	<i>Eucrate costata</i>	B
Arthropoda	Malacostraca	Decapoda	Goneplacidae	<i>Goneplax</i> sp.	W
Arthropoda	Malacostraca	Decapoda	Goneplacidae	<i>Typhlocarcinops canaliculata</i>	B
Arthropoda	Malacostraca	Decapoda	Goneplacidae	<i>Typhlocarcinops denticarpus</i>	B
Arthropoda	Malacostraca	Decapoda	Goneplacidae	<i>Typhlocarcinus villosus</i>	B
Arthropoda	Malacostraca	Decapoda	Goneplacidae	<i>Xenophthalmus pinnotheroides</i>	B
Arthropoda	Malacostraca	Decapoda	Pasiphaeidae	<i>Leptocheila</i>	B



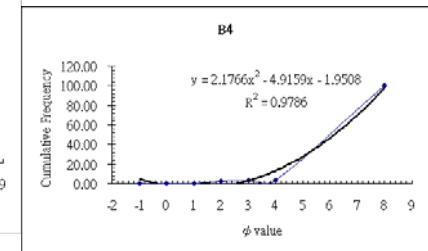
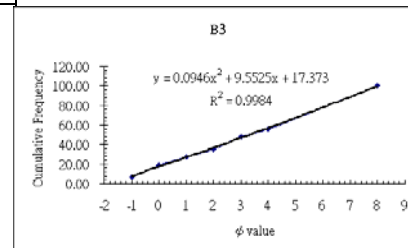
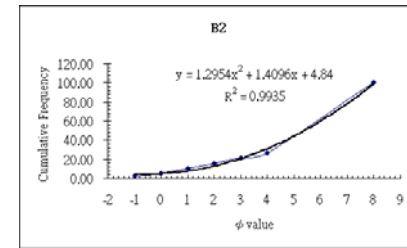
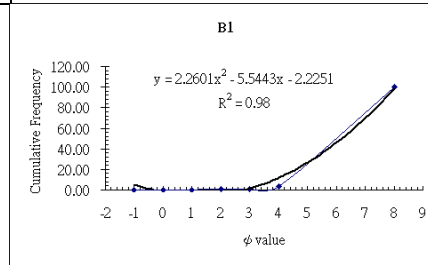
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Arthropoda	Malacostraca	Decapoda	Penaeidae	<i>Metapenaeopsis barbata</i>	W	
Arthropoda	Malacostraca	Decapoda	Penaeidae	<i>Miyadiella podophthalmus</i>	D	
Arthropoda	Malacostraca	Decapoda	Pinnotheridae	<i>Neoxenophthalmus obscurus</i>	B	
Arthropoda	Malacostraca	Decapoda	Porcellanidae	<i>Porcellanella triloba</i>	D	
Arthropoda	Malacostraca	Decapoda	Porcellanidae	<i>Raphidopus ciliatus</i>	B	
Arthropoda	Malacostraca	Decapoda	Portunidae	<i>Charybdis affinis</i>	D	
Arthropoda	Malacostraca	Decapoda	Portunidae	<i>Charybdis hongkongensis</i>	W	
Arthropoda	Malacostraca	Decapoda	Portunidae	<i>Charybdis natator</i>	W	
Arthropoda	Malacostraca	Decapoda	Portunidae	<i>Charybdis variegata</i>	D	
Arthropoda	Malacostraca	Decapoda	Processidae	<i>Processa japonica</i>	B	
Arthropoda	Malacostraca	Decapoda		Shrimp larvae	W	
Arthropoda	Malacostraca	Stomatopoda		Mantis shrimp larvae	W	

Arthropoda	Malacostraca	Tanaidacea	Apseudidae	<i>Apseudes</i> sp.	D
Phoronida	Phoronidea		Phoronidae	<i>Phoronis</i> sp.	B
Echinodermata	Ophiuroidea	Gnathophiurida	Amphiuridae	<i>Amphioplus laevis</i>	W
Echinodermata	Ophiuroidea	Gnathophiurida	Amphiuridae	<i>Amphipholis squamata</i>	B
Echinodermata	Ophiuroidea	Gnathophiurida	Amphiuridae	<i>Amphiura hexactis</i>	B
Chordata	Amphioxii	Amphioxiformes	Amphioxidae	<i>Branchiostoma belcheri</i>	W
Chordata	Osteichthyes	Anguilliformes	Ophichthyidae	<i>Ophichthus</i> sp.	B
Chordata	Osteichthyes	Gadiformes	Bregmacerotidae	<i>Bregmaceros atlanticus</i>	W
Chordata	Osteichthyes	Gadiformes	Bregmacerotidae	<i>Bregmaceros maclellandi</i>	W
Chordata	Osteichthyes	Perciformes	Gobiidae	<i>Ctenogobius brevirostris</i>	W

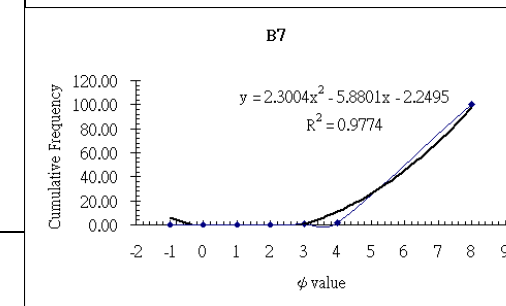
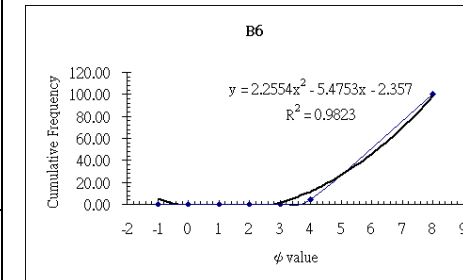
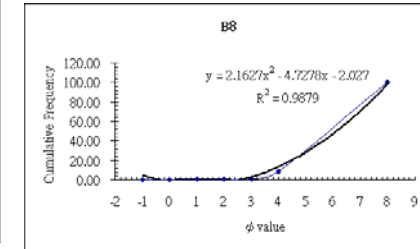
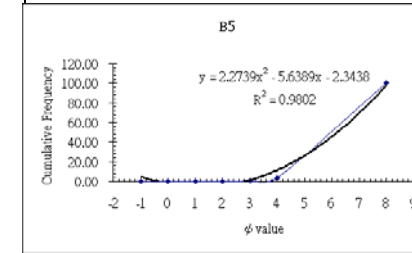
Chordata	Osteichthyes	Perciformes	Gobiidae	<i>Trypauchen vagina</i>	D
Chordata	Osteichthyes	Perciformes	Taenioididae	<i>Odontamblyopus</i> sp.	B

**Wet Season PSD**

Season	Station	$\psi$ value	Weight (g)	Cumulative wt (g)	Cumulative %
Wet (Aug. 2006)	B1	-1	0.06	0.06	0.04
		0	0.18	0.24	0.15
		1	0.08	0.32	0.20
		2	0.38	0.70	0.44
		3	0.63	1.33	0.84
		4	3.75	5.08	3.21
		8	153.17	158.25	100.00
	B2	-1	4.13	4.13	2.47
		0	4.55	8.68	5.19
		1	8.53	17.21	10.29
		2	8.38	25.59	15.30
		3	10.22	35.81	21.40
		4	8.12	43.93	26.26
		8	123.37	167.30	100.00
	B3	-1	20.76	20.76	6.84
		0	36.80	57.56	18.96
		1	25.72	83.28	27.43
		2	24.09	107.37	35.36
		3	39.33	146.70	48.32
		4	23.60	170.30	56.09
		8	133.33	303.63	100.00

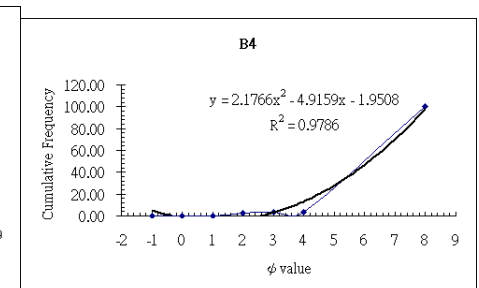
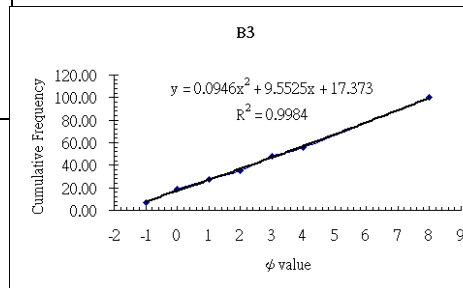
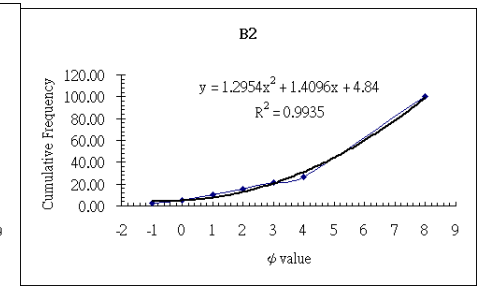
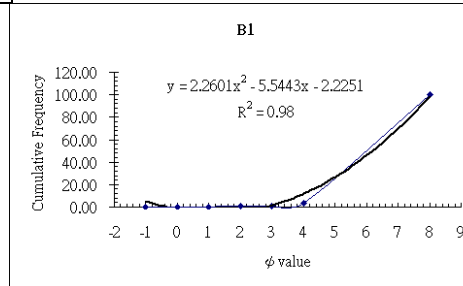


	B4	-1	0.01	0.01	0.01
		0	0.05	0.06	0.04
		1	0.01	0.07	0.04
		2	3.77	3.84	2.37
		3	1.73	5.57	3.44
		4	0.35	5.92	3.65
		8	156.12	162.04	100.00
		B5	-1	0.04	0.04
	0		0.01	0.05	0.03
	1		0.05	0.10	0.06
	2		0.13	0.23	0.14
	3		0.60	0.83	0.50
	4		4.19	5.02	3.01
	8		161.97	166.99	100.00
	B6	-1	0.01	0.01	0.01
		0	0.03	0.04	0.02
		1	0.06	0.10	0.06
		2	0.07	0.17	0.10
		3	0.52	0.69	0.40
		4	6.35	7.04	4.10
	B7	8	164.66	171.70	100.00
		-1	0.21	0.21	0.13
		0	0.01	0.22	0.14
		1	0.05	0.27	0.17

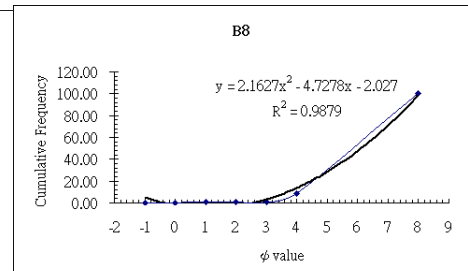
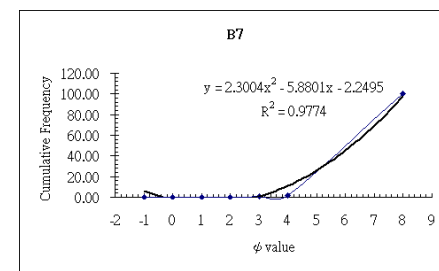
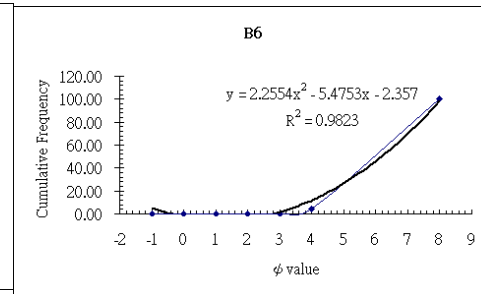
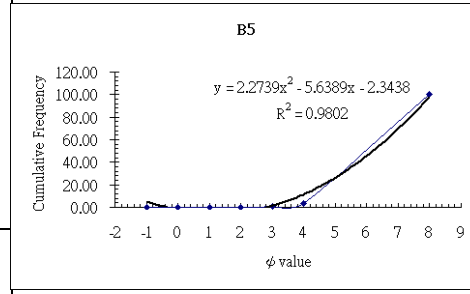


		2	0.11	0.38	0.24
		3	0.36	0.74	0.46
		4	2.00	2.74	1.70
		8	158.50	161.24	100.00
	B8	-1	0.35	0.35	0.18
		0	0.24	0.59	0.30
		1	0.30	0.89	0.45
		2	0.29	1.18	0.60
		3	1.07	2.25	1.14
		4	14.02	16.27	8.23
		8	181.31	197.58	100.00

Season	Station	$\psi$ value	Weight (g)	Cumulative wt (g)	Cumulative %
Wet (Aug. 2006)	B1	-1	0.06	0.06	0.04
		0	0.18	0.24	0.15
		1	0.08	0.32	0.20
		2	0.38	0.70	0.44
		3	0.63	1.33	0.84
		4	3.75	5.08	3.21
		8	153.17	158.25	100.00
		B2	-1	4.13	4.13
	0		4.55	8.68	5.19
	1		8.53	17.21	10.29
	2		8.38	25.59	15.30
	3		10.22	35.81	21.40
	4		8.12	43.93	26.26
	8		123.37	167.30	100.00
	B3		-1	20.76	20.76
		0	36.80	57.56	18.96
		1	25.72	83.28	27.43
		2	24.09	107.37	35.36
		3	39.33	146.70	48.32
		4	23.60	170.30	56.09
		8	133.33	303.63	100.00



	B4	-1	0.01	0.01	0.01
		0	0.05	0.06	0.04
		1	0.01	0.07	0.04
		2	3.77	3.84	2.37
		3	1.73	5.57	3.44
		4	0.35	5.92	3.65
		8	156.12	162.04	100.00
		B5	-1	0.04	0.04
	0		0.01	0.05	0.03
	1		0.05	0.10	0.06
	2		0.13	0.23	0.14
	3		0.60	0.83	0.50
	4		4.19	5.02	3.01
	8		161.97	166.99	100.00
	B6		-1	0.01	0.01
		0	0.03	0.04	0.02
		1	0.06	0.10	0.06
		2	0.07	0.17	0.10
		3	0.52	0.69	0.40
		4	6.35	7.04	4.10
		8	164.66	171.70	100.00
		B7	-1	0.21	0.21
	0		0.01	0.22	0.14
	1		0.05	0.27	0.17

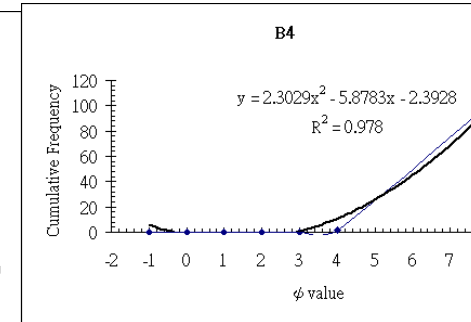
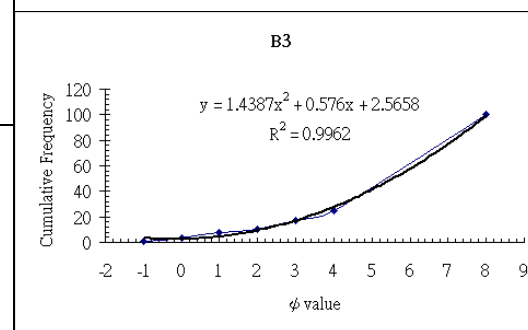
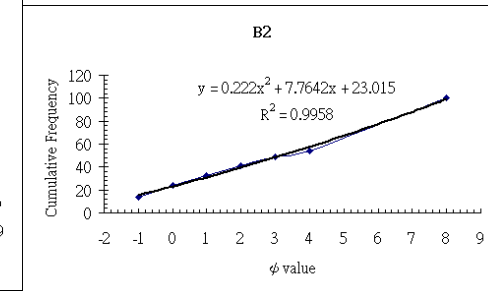
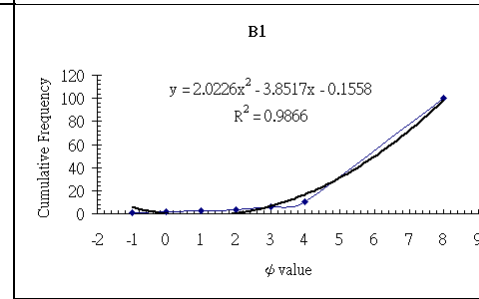




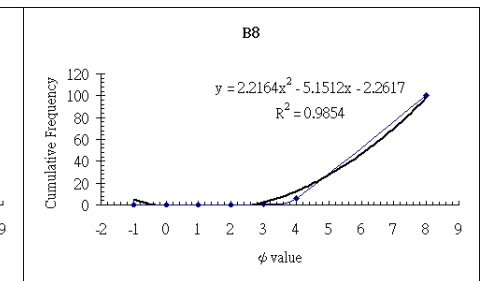
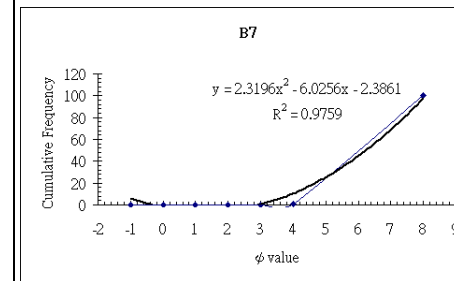
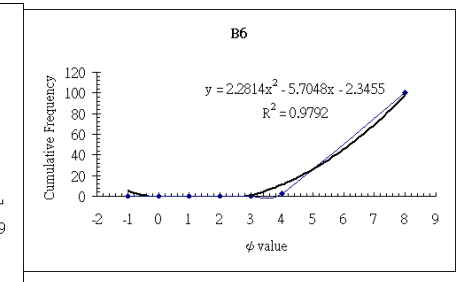
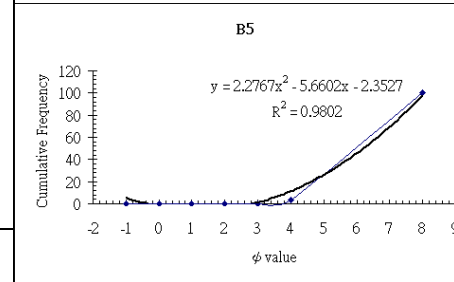
		2	0.11	0.38	0.24
		3	0.36	0.74	0.46
		4	2.00	2.74	1.70
		8	158.50	161.24	100.00
	B8	-1	0.35	0.35	0.18
		0	0.24	0.59	0.30
		1	0.30	0.89	0.45
		2	0.29	1.18	0.60
		3	1.07	2.25	1.14
		4	14.02	16.27	8.23
		8	181.31	197.58	100.00

**Dry Season PSD**

Season	Station	$\psi$ value	Weight (g)	Cumulative wt (g)	Cumulative %
Dry (Jan. 2007)	B1	-1	1.39	1.39	0.88
		0	0.87	2.26	1.43
		1	1.07	3.33	2.10
		2	0.96	4.29	2.71
		3	2.62	6.91	4.37
		4	5.16	12.07	7.63
		8	106.20	118.27	74.74
	B2	-1	26.93	26.93	16.10
		0	20.09	47.02	28.11
		1	17.42	64.44	38.52
		2	16.36	80.80	48.30
		3	15.07	95.87	57.30
		4	11.45	107.32	64.15
	B3	8	89.88	197.20	117.87
		-1	1.31	1.31	0.43
		0	3.17	4.48	1.48
		1	4.93	9.41	3.10
		2	3.35	12.76	4.20
		3	8.50	21.26	7.00
4		9.30	30.56	10.06	



		8	93.27	123.83	40.78
B4		-1	0.01	0.01	0.01
		0	0.01	0.02	0.01
		1	0.01	0.03	0.02
		2	0.01	0.04	0.02
		3	0.12	0.16	0.10
		4	1.81	1.97	1.22
		8	104.64	106.61	65.79
B5		-1	0.01	0.01	0.01
		0	0.03	0.04	0.02
		1	0.01	0.05	0.03
		2	0.07	0.12	0.07
		3	0.17	0.29	0.17
		4	2.32	2.61	1.56
		8	84.17	86.78	51.97
B6		-1	0.01	0.01	0.01
		0	0.01	0.02	0.01
		1	0.01	0.03	0.02
		2	0.22	0.25	0.15
		3	0.10	0.35	0.20
		4	1.89	2.24	1.30
		8	84.81	87.05	50.70
B7		-1	0.01	0.01	0.01
		0	0.01	0.02	0.01



		1	0.01	0.03	0.02
		2	0.04	0.07	0.04
		3	0.07	0.14	0.09
		4	0.58	0.72	0.45
		8	80.20	80.92	50.19
	B8	-1	0.06	0.06	0.03
		0	0.01	0.07	0.04
		1	0.04	0.11	0.06
		2	0.04	0.15	0.08
		3	0.31	0.46	0.23
		4	4.09	4.55	2.30
		8	70.91	75.46	38.19

**TOM**

Season	Station	Replicate	Fresh wt. (g)	Wt. after 100°C (g)	Wt. after 500°C (g)	TOM d.w. (%)	Mean TOM (%)	±SD (%)
Wet (Aug. 2006)	B1	a	5.54	2.67	2.49	6.86	6.78	0.13
		b	5.15	2.33	2.18	6.69		
	B2	a	5.15	4.95	4.81	2.70	2.43	0.38
		b	5.13	4.93	4.82	2.16		
	B3	a	5.23	4.19	4.02	4.18	3.69	0.70
		b	5.27	4.20	4.06	3.19		
	B4	a	5.32	2.66	2.52	5.13	5.36	0.33
		b	5.65	2.92	2.76	5.59		
	B5	a	5.23	3.09	2.96	4.24	4.84	0.85
		b	5.63	3.36	3.17	5.44		
	B6	a	5.56	3.42	3.26	4.68	5.31	0.88
		b	5.63	2.82	2.65	5.93		
	B7	a	5.49	2.53	2.37	6.37	6.55	0.25
		b	5.24	2.96	2.76	6.72		
B8	a	5.13	3.60	3.41	5.26	4.98	0.39	
	b	5.56	2.96	2.82	4.71			

Season	Station	Replicate	Fresh wt. (g)	Wt. after 100°C (g)	Wt. after 500°C (g)	TOM d.w. (%)	Mean TOM (%)	±SD (%)
Dry (Jan. 2007)	B1	a	5.37	2.20	2.03	7.85	7.70	0.22
		b	5.66	2.09	1.93	7.54		
	B2	a	5.21	3.38	3.28	3.05	2.73	0.45
		b	5.89	3.47	3.39	2.41		
	B3	a	5.41	2.72	2.59	4.44	4.43	0.00
		b	5.63	2.91	2.78	4.43		
	B4	a	5.22	2.37	2.22	6.28	6.44	0.23

		b	5.81	2.47	2.31	6.60		
	B5	a	5.55	1.96	1.80	7.75	7.40	0.49
		b	5.62	2.21	2.05	7.06		
	B6	a	5.47	2.31	2.14	7.21	7.13	0.11
		b	5.33	2.29	2.12	7.06		
	B7	a	5.22	2.27	2.10	7.54	7.18	0.51
		b	5.08	2.22	2.07	6.82		
	B8	a	5.67	2.17	2.04	5.58	5.20	0.54
		b	5.48	2.41	2.29	4.81		