

**The National Marine Biological
Analytical Quality Control Scheme**

Macrobenthic Exercise Results – MB12

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EXERCISE DETAILS

Macrobenthos #12

Type/Contents – Day Grab; approx. 7 litres estuarine mud; Medway.

Circulated – 16/09/2004

Completion Date – 15/02/2005

Number of Participating Laboratories – 10

Number of Results Received – 09

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Table 1. Results from the analysis of Macrobenthic sample MB12 by the participating laboratories.

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
LabCode	Number of Taxa				Number of Individuals				Not extracted			Individuals Count Error	Similarity index	Taxonomic errors
	PL	UM	Diff (n)	%max	PL	UM	Diff (n)	%max	New Taxa	Ind	%ind			
LB1104	8	8	0	0.0	280	284	-4	1.4	1	2	0.7	-2	91.84	1
LB1107	15	13	2	13.3	59	58	1	1.7	0	0	0.0	1	59.83	1
LB1108	9	11	-2	18.2	23	27	-4	14.8	2	3	11.1	-1	86.28	1
LB1111	9	9	0	0.0	130	134	-4	3.0	0	1	0.7	-3	96.97	1
LB1113	-	-	-	-	-	-	-	-	-	-	-	-	-	-
LB1114	6	6	0	0.0	41	42	-1	2.4	0	1	2.4	0	84.34	1
LB1115	6	7	-1	14.3	73	76	-3	3.9	1	1	1.3	-2	68.00	3
LB1116	12	12	0	0.0	120	120	0	0.0	0	0	0.0	0	100.00	0
LB1117	8	10	-2	20.0	210	207	3	1.4	2	3	1.4	6	48.80	3
LB1124	6	8	-2	25.0	83	96	-13	13.5	2	13	13.5	0	60.34	2

Key: PL - participating laboratory.

UM - Unicomarine Ltd.

"-" - No data. See forthcoming Annual Report, Section 6, for details.

Table 2. Comparison of the efficiency of extraction of fauna by the participating laboratories for the major taxonomic groups present in sample MB12.

LabCode		Nemertea	Polychaeta	Oligochaeta	Chelicerata	Crustacea	Echinodermata	Mollusca	Other	Overall	
LB1104	UM count	-	276	-	-	1	-	7	-	284	
	PL missed	-	1	-	-	1	-	0	-	2	
	%missed	-	0.4	-	-	100.0	-	0.0	-	0.7	
LB1107	UM count	1	24	4	-	28	-	1	-	58	
	PL missed	0	0	0	-	0	-	0	-	0	
	%missed	0.0	0.0	0.0	-	0.0	-	0.0	-	0.0	
LB1108	UM count	-	9	-	-	12	-	6	-	27	
	PL missed	-	0	-	-	2	-	1	-	3	
	%missed	-	0.0	-	-	16.7	-	16.7	-	11.1	
LB1111	UM count	-	123	1	-	3	-	7	-	134	
	PL missed	-	0	0	-	0	-	1	-	1	
	%missed	-	0.0	0.0	-	0.0	-	14.3	-	0.7	
LB1113	UM count	-	-	-	-	-	-	-	-	0	
	PL missed	-	NO SAMPLE / DATA RETURNED							-	0
	%missed	-	-	-	-	-	-	-	-	-	
LB1114	UM count	-	34	1	-	-	-	7	-	42	
	PL missed	-	0	0	-	-	-	1	-	1	
	%missed	-	0.0	0.0	-	-	-	14.3	-	2.4	
LB1115	UM count	-	69	4	-	-	-	3	-	76	
	PL missed	-	1	0	-	-	-	0	-	1	
	%missed	-	1.4	0.0	-	-	-	0.0	-	1.3	
LB1116	UM count	-	100	11	-	1	-	8	-	120	
	PL missed	-	0	0	-	0	-	0	-	0	
	%missed	-	0.0	0.0	-	0.0	-	0.0	-	0.0	
LB1117	UM count	-	194	7	-	-	-	6	-	207	
	PL missed	-	1	1	-	-	-	1	-	3	
	%missed	-	0.5	14.3	-	-	-	16.7	-	1.4	
LB1124	UM count	-	79	11	-	-	-	6	-	96	
	PL missed	-	8	1	-	-	-	4	-	13	
	%missed	-	10.1	9.1	-	-	-	66.7	-	13.5	

Key: PL - participating laboratory.
 UM - Unicomarine Ltd.
 "-" - No data. See forthcoming Annual Report, Section 6, for details.

Table 3. Comparison of the estimates of biomass made by the participating laboratories with those made by Unicomarine Ltd. for the major taxonomic groups present in sample MB12. Values are in grams (g).

LabCode		Nemertea	Polychaeta	Oligochaeta	Chelicerata	Crustacea	Echinodermata	Mollusca	Other	Overall	
LB1104	PL	-	0.07869	-	-	-	-	2.01127	-	2.08996	
	UM	-	0.0828	-	-	-	-	2.0466	-	2.1294	
	%diff.	-	-5.2	-	-	-	-	-1.8	-	-1.9	
LB1107	PL	-	-	-	-	-	-	-	-	0.0000	
	UM	-	NO BIOMASS DATA						-	-	0.0000
	%diff.	-	-	-	-	-	-	-	-	-	
LB1108	PL	-	-	-	-	-	-	-	-	0	
	UM	-	NO BIOMASS DATA						-	-	0
	%diff.	-	-	-	-	-	-	-	-	-	
LB1111	PL	-	-	-	-	-	-	-	-	0	
	UM	-	NO BIOMASS DATA						-	-	0
	%diff.	-	-	-	-	-	-	-	-	-	
LB1113	PL	-	-	-	-	-	-	-	-	0	
	UM	-	NO SAMPLE / DATA RETURNED						-	-	0
	%diff.	-	-	-	-	-	-	-	-	-	
LB1114	PL	-	0.0387	0.0001	-	-	-	2.5059	-	2.5447	
	UM	-	0.0426	0.0001	-	-	-	2.561	-	2.6037	
	%diff.	-	-10.1	0.0	-	-	-	-2.2	-	-2.3	
LB1115	PL	-	0.0317	0.0001	-	-	-	0.0914	-	0.1232	
	UM	-	0.0229	0.0001	-	-	-	0.0912	-	0.1142	
	%diff.	-	27.8	0.0	-	-	-	0.2	-	7.3	
LB1116	PL	-	0.0487	0.0001	-	0.0001	-	0.9782	-	1.0271	
	UM	-	0.0389	0.0001	-	0.0002	-	0.8545	-	0.8937	
	%diff.	-	20.1	0.0	-	-100.0	-	12.6	-	13.0	
LB1117	PL	-	0.08539	0.00014	-	-	-	0.69087	-	0.77640	
	UM	-	0.1333	0.0001	-	-	-	0.6839	-	0.8173	
	%diff.	-	-56.1	28.6	-	-	-	1.0	-	-5.3	
LB1124	PL	-	-	-	-	-	-	-	-	0	
	UM	-	BIOMASS NOT COMPARABLE						-	-	0
	%diff.	-	-	-	-	-	-	-	-	-	

Key: PL - participating laboratory
 UM - Unicomarine Ltd.
 "-" - No data. See Annual Report, Section 6, for details.

Table 4. Variation in faunal content of samples distributed as MB12.

Taxa*

LabCode	Nemertea	Polychaeta	Oligochaeta	Chelicerata	Crustacea	Echinodermata	Mollusca	Other	Total taxa
LB1104	0	5	0	0	1	0	3	0	9
LB1107	1	6	2	0	3	0	1	0	13
LB1108	0	5	0	0	3	0	2	1	11
LB1111	0	5	1	0	2	0	2	0	10
LB1113	-	-	-	-	-	-	-	-	-
LB1114	0	3	1	0	0	0	2	0	6
LB1115	0	3	1	0	0	0	2	1	7
LB1116	0	4	1	0	1	0	3	3	12
LB1117	0	6	1	0	0	0	2	1	10
LB1124	0	4	1	0	0	0	3	0	8
Mean	0	5	1	0	1	0	2	1	10
Max	1	6	2	0	3	0	3	3	13
Min	0	3	0	0	0	0	1	0	6

*UM data used for all faunal groups (excludes colonial taxa).

Individuals*

LabCode	Nemertea	Polychaeta	Oligochaeta	Chelicerata	Crustacea	Echinodermata	Mollusca	Other	Total Ind.
LB1104	0	276	0	0	1	0	7	0	284
LB1107	1	24	4	0	28	0	1	0	58
LB1108	0	9	0	0	12	0	6	0	27
LB1111	0	123	1	0	4	0	7	0	135
LB1113	-	-	-	-	-	-	-	-	-
LB1114	0	34	1	0	0	0	7	0	42
LB1115	0	69	4	0	0	0	3	0	76
LB1116	0	100	11	0	1	0	8	0	120
LB1117	0	194	7	0	0	0	6	0	207
LB1124	0	79	11	0	0	0	6	0	96
Mean	0	101	4	0	5	0	6	0	116
Max	1	276	11	0	28	0	8	0	284
Min	0	9	0	0	0	0	1	0	27

*UM data used for all faunal groups (excludes colonial taxa).

Figure 1. MB12 data (Untransformed - Raw).

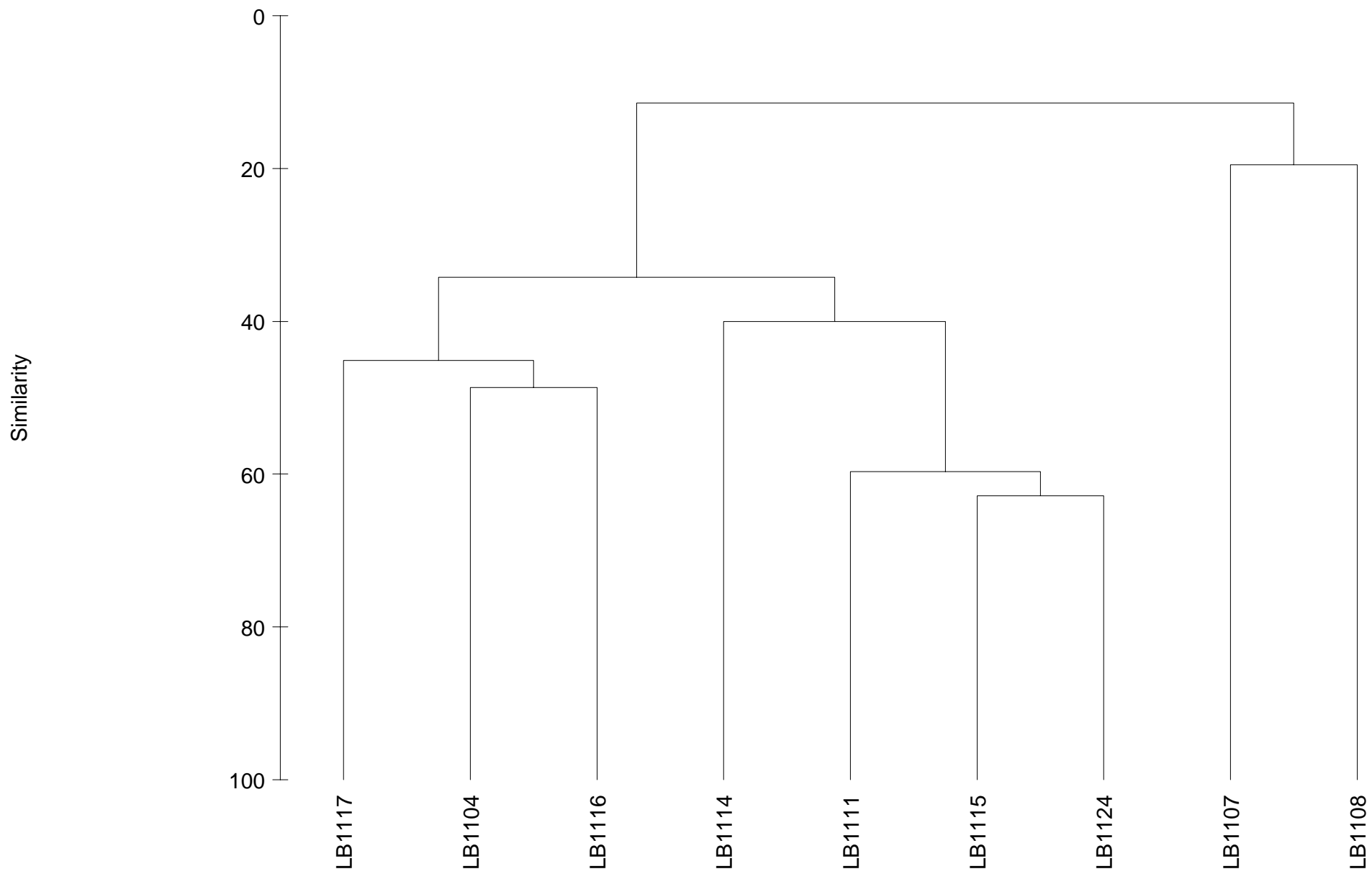


Figure 2. MB12 data reanalysed by Unicomarine Ltd. (Untransformed).

