

# Zooplankton Data Collected with BIOMASS Programme at Syowa Station in 1984 by JARE-25\*

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As part of the international BIOMASS (Biological Investigations of Marine Antarctic Systems and Stocks) programme, the Japanese Antarctic Research Expedition (JARE) conducted a three-year programme of marine biological investigations in the fast ice area near Syowa Station during 1982 (JARE-23) through 1984 (JARE-25). Zooplankton were sampled routinely at three fixed stations near Syowa Station in JARE-25 (Fig. 1). Details of the sampling methods and the sampling frequencies are published in JARE Data Reports No. 121 (MATSUDA *et al.*, 1987).

This report summarizes the data on zooplankton collected in the JARE-25 over-wintering programme in 1984. A total of 52 samples were obtained with two kinds of Norpac nets during February 1984 through January 1985 (Table 1). Size of both is 45 cm in diameter and 180 cm in side length. The mesh openings of the nets were 25  $\mu\text{m}$  (P25 net) and 330  $\mu\text{m}$  (GG54), respectively. The results of primary sorting are presented here.

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\* JARE-25 BIOLOGY Cont. No. 13.

Zooplankton samples were sorted into 11 categories as shown in the attached zooplankton record sheets here. Category 1 was composed of four microzooplankton groups; ciliates, foraminifers, copepod nauplii and unidentified eggs. Copepoda (Category 6) includes Calanoida, Cyclopoida and Harpacticoida. Euphausiacea (Category 7) includes nauplius and calyptopis stages. Planktonic larval forms (Category 9) include benthic invertebrate larvae (*i.e.*, polychaetes, gastropods, bryozoans, brachiopods, echinoderms and ascidians). Sample processing and treatment of data were the same as described in the preceding report (*cf.* TANIMURA *et al.*, 1989); the specimens were sorted from a whole sample or subsample divided with suitable proportion according to sample size, and total number of each category per haul and a unit volume of water filtered (m<sup>3</sup>) are summed up from individual numbers obtained at each sorting stage. Specimens for each category were sorted into individual vials and preserved in formalin (3% in seawater). They are retained at the National Institute of Polar Research, Tokyo. These samples are open to the use of any scientists. Further details on the data and specimens can be obtained from:

Department of Biological Data  
Division of Data Collection and Processing  
National Institute of Polar Research  
9-10, Kaga 1-chome, Itabashi-ku, Tokyo 173

### References

- Mastuda, O., Ishikawa, S. and Kawaguchi, K. (1987): Oceanographic and marine biological data based on the routine observations near Syowa Station between February 1984 and January 1985 (JARE-25). JARE Data Rep., 121 (Mar. Biol. 10), 21p.
- Tanimura, A., Fukuchi, M., Ohtsuka, H. and Hoshiai, T. (1989): Zooplankton data collected with BIOMASS programme at Syowa Station in the 1982 by JARE-23. I. Norpac net samples. JARE Data Rep., 147 (Mar. Biol. 15), 162p.

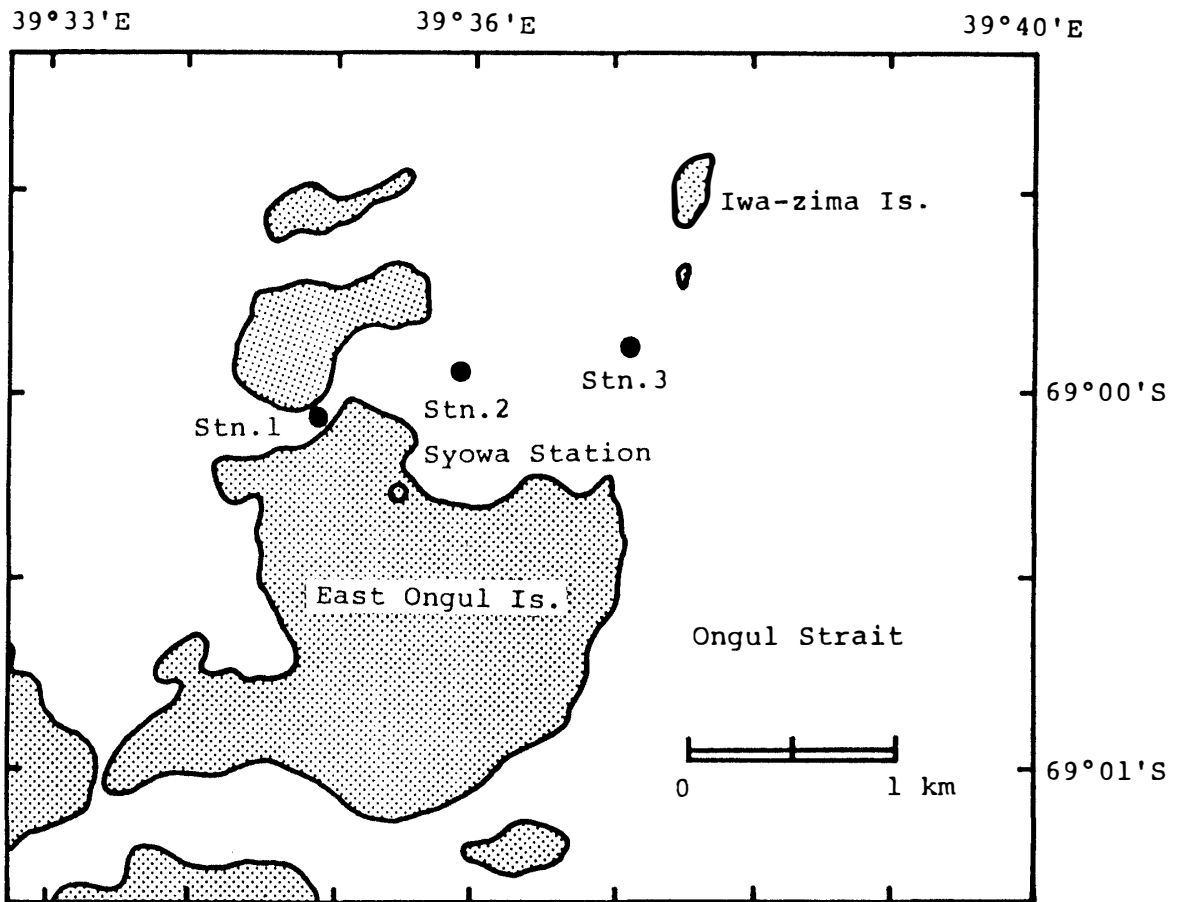


Fig. 1 Sampling locations for routine observations by JARE-25.

Table 1. A list of samples dealt with a primary sorting.

Stn.	Date	Length of Wire (m)	Mesh size ( $\mu$ m)	Sample No.	Series No.
1	1984				
	18 Apr.	10	25	2501NP01	25-001
			330	2501NG01	25-002
	19 May	10	25	2501NP02	25-003
			330	2501NG02	25-004
	12 July	10	25	2501NP03	25-005
			330	2501NG03	25-006
	10 Sep.	10	25	2501NP04	25-007
			330	2501NG04	25-008
	17 Nov.	10	25	2501NP05	25-009
			330	2501NG05	25-010
	5 Dec.	11	25	2501NP06	25-011
		330	2501NG06	25-012	
2	1984				
	16 Mar.	30	25	2502NP01	25-013
			330	2502NG01	25-014
	19 Mar.	30	25	2502NP02	25-015
			330	2502NG02	25-016
	13 Apr.	35	25	2502NP03	25-017
			330	2502NG03	25-018
	16 May	35	25	2502NP04	25-019
			330	2502NG04	25-020
	15 June	35	25	2502NP05	25-021
		33	330	2502NG05	25-022
	13 July	30	25	2502NP06	25-023
			330	2502NG06	25-024
	10 Sep.	32	25	2502NP07	25-025
			330	2502NG07-1	25-026
			330	2502NG07-2	25-027
	9 Oct.	30	25	2502NP08	25-028
			330	2502NG08	25-029
	17 Nov.	34	25	2502NP09	25-030
			330	2502NG09	25-031
5 Dec.	34	25	2502NP10	25-032	
		330	2502NG10	25-033	
1985					
6 Jan.	30	25	2502NP11	25-034	
		33	2502NG11	25-035	

Stn.	Date	Length of Wire (m)	Mesh size ( $\mu$ m)	Sample No.	Series No.
	1984				
3	18 Feb.	35	330	2503NG01	25-036
	18 May	60	25	2503NP01	25-037
			330	2503NG02	25-038
	14 June	42	25	2503NP02	25-039
			330	2503NG03	25-040
	14 July	40	25	2503NP03	25-041
			330	2503NG04	25-042
	6 Sep.	35	25	2503NP04	25-043
			330	2503NG05	25-044
	8 Oct.	35	25	2503NP05	25-045
			330	2503NG06	25-046
	15 Nov.	35	25	2503NP06	25-047
			330	2503NG07	25-048
	4 Dec.	37	25	2503NP07	25-049
330			2503NG08	25-050	
	1985				
	4 Jan.	35	25	2503NP08	25-051
			330	2503NG09	25-052

## ZOOPLANKTON RECORD SHEET

Series No. 25-001

1. Sample No. 2501NP01      7. Net used NORPAC(25µm)  
 2. JARE 25      8. Method of haul Vertical  
 3. Area Syowa Station      9. Wire run out (m) 10  
 4. Station No. 1      10. Depth of haul (m) 10  
 5. Position 69° 00' 00" S      11. Volume of water filtered\*(m<sup>3</sup>) 0.18  
                   39° 35' 00" E      12. Total number per m<sup>3</sup> 4334  
 6. Date & Time(LMT) 1984/4/18, 09:45-11:00

Proportion of Sample sorted	(1/1 Sample)		(1/5 Sample)		(/ Sample)		Indiv. No. per haul	Indiv. No. per m <sup>3</sup>
	Sort I		Sort II		Sort III			
Category	Vial No.	Indiv. No. in vial	Vial No.	Indiv. No. in vial	Vial No.	Indiv. No. in vial		
1. Ciliata			II-1	24			120	667
Foraminifera								
Copepoda, nauplius			II-1	93			465	2583
Eggs**			II-1	2			10	56
2. Hydroida								
3. Siphonophora								
4. Chaetognatha								
5. Nematoda			II-5	1			5	28
6. Copepoda	I-6	155	I-6	5			180	1000
7. Euphausiacea								
8. Appendicularia								
9. Planktonic larval forms								
10. Others								
11. Isopoda								
Total		155		125			780	4334

Remarks;      \*      calculated by assumption.  
                   \*\*      unidentified eggs which may be of copepods and/or benthic invertebrate.  
                   +      less than 1 indiv. /m<sup>3</sup>.

## ZOOPLANKTON RECORD SHEET

Series No. 25-002

1. Sample No. <u>2501NG01</u>	7. Net used <u>NORPAC(330μm)</u>
2. JARE <u>25</u>	8. Method of haul <u>Vertical</u>
3. Area <u>Syowa Station</u>	9. Wire run out (m) <u>10</u>
4. Station No. <u>1</u>	10. Depth of haul (m) <u>10</u>
5. Position <u>69° 00' 00" S</u>	11. Volume of water filtered*(m <sup>3</sup> ) <u>1.68</u>
<u>39° 35' 00" E</u>	12. Total number per m <sup>3</sup> <u>8</u>
6. Date & Time(LMT) <u>1984/3/12, 11:10-12:10</u>	

Proportion of Sample sorted	(1/1 Sample) Sort I		( / Sample) Sort II		( / Sample) Sort III		Indiv. No. per haul	Indiv. No. per m <sup>3</sup>
	Vial No.	Indiv. No. in vial	Vial No.	Indiv. No. in vial	Vial No.	Indiv. No. in vial		
1. Ciliata								
Foraminifera								
Copepoda, nauplius								
Eggs**								
2. Hydroida								
3. Siphonophora								
4. Chaetognatha								
5. Nematoda								
6. Copepoda	I-6	14					14	8
7. Euphausiacea								
8. Appendicularia								
9. Planktonic larval forms								
10. Others								
11. Isopoda								
<b>Total</b>		<b>14</b>					<b>14</b>	<b>8</b>

Remarks; \* calculated by assumption.  
 \*\* unidentified eggs which may be of copepods and/or benthic invertebrate.  
 + less than 1 indiv. /m<sup>3</sup>.

## ZOOPLANKTON RECORD SHEET

Series No. 25-003

1. Sample. No. 2501NP02 7. Net used NORPAC(25 $\mu$ m)  
 2. JARE 25 8. Method of haul Vertical  
 3. Area Syowa Station 9. Wire run out (m) 10  
 4. Station No. 1 10. Depth of haul (m) 10  
 5. Position 69° 00' 00" S 11. Volume of water filtered\*(m<sup>3</sup>) 0.16  
39° 35' 00" E 12. Total number per m<sup>3</sup> 9313  
 6. Date & Time(LMT) 1984/5/19, 11:36-12:50

Proportion of Sample sorted	(1/1 Sample)		(1/4 Sample)		(/ Sample)		Indiv. No. per haul	Indiv. No. per m <sup>3</sup>
	Sort I		Sort II		Sort III			
Category	Vial No.	Indiv. No. in vial	Vial No.	Indiv. No. in vial	Vial No.	Indiv. No. in vial		
1. Ciliata			II-1	7			28	175
Foraminifera								
Copepoda, nauplius			II-1	287			1148	7175
Eggs**			II-1	2			8	50
2. Hydroida								
3. Siphonophora								
4. Chaetognatha								
5. Nematoda								
6. Copepoda	I-6	250	I-6	13			302	1888
7. Euphausiacea								
8. Appendicularia			II-8	1			4	25
9. Planktonic larval forms								
10. Others								
11. Isopoda								
Total		250		310			1490	9313

Remarks; \* calculated by assumption.  
 \*\* unidentified eggs which may be of copepods and/or benthic invertebrate.  
 + less than 1 indiv. /m<sup>3</sup>.



## ZOOPLANKTON RECORD SHEET

Series No. 25-004

1. Sample. No. 2501NG02      7. Net used NORPAC(330 $\mu$ m)  
 2. JARE 25      8. Method of haul Vertical  
 3. Area Syowa Station      9. Wire run out (m) 10  
 4. Station No. 1      10. Depth of haul (m) 10  
 5. Position 69° 00' 00" S      11. Volume of water filtered\*(m<sup>3</sup>) 1.45  
                   39° 35' 00" E      12. Total number per m<sup>3</sup> 10  
 6. Date & Time(LMT) 1984/4/18, 11:36-12:50

Proportion of Sample sorted	(1/1 Sample) Sort I		(/ Sample) Sort II		(/ Sample) Sort III		Indiv. No. per haul	Indiv. No. per m <sup>3</sup>
	Vial No.	Indiv. No. in vial	Vial No.	Indiv. No. in vial	Vial No.	Indiv. No. in vial		
1. Ciliata								
Foraminifera								
Copepoda, nauplius								
Eggs**								
2. Hydroida								
3. Siphonophora								
4. Chaetognatha								
5. Nematoda								
6. Copepoda	I-6	15					15	10
7. Euphausiacea								
8. Appendicularia								
9. Planktonic larval forms								
10. Others								
11. Isopoda								
Total		15					15	10

Remarks;      \*      calculated by assumption.  
                   \*\*      unidentified eggs which may be of copepods and/or benthic invertebrate.  
                   +      less than 1 indiv. /m<sup>3</sup>.

## ZOOPLANKTON RECORD SHEET

Series No. 25-005

1. Sample. No. 2501NP03                      7. Net used NORPAC(25µm)  
 2. JARE 25                                              8. Method of haul Vertical  
 3. Area Syowa Station                      9. Wire run out (m) 10  
 4. Station No. 1                                              10. Depth of haul (m) 10  
 5. Position 69° 00' 00" S                      11. Volume of water filtered\*(m<sup>3</sup>) 0.14  
                   39° 35' 00" E                      12. Total number per m<sup>3</sup> 4457  
 6. Date & Time(LMT) 1984/7/12, 11:30-12:00

Proportion of Sample sorted	(1/1 Sample)		(1/4 Sample)		(/ Sample)		Indiv. No. per haul	Indiv. No. per m <sup>3</sup>
	Sort I		Sort II		Sort III			
Category	Vial No.	Indiv. No. in vial	Vial No.	Indiv. No. in vial	Vial No.	Indiv. No. in vial		
1. Ciliata			II-1	6			24	171
Foraminifera								
Copepoda, nauplius	I-1	3	II-1	37			151	1079
Eggs**			II-1	2			8	57
2. Hydroida								
3. Siphonophora								
4. Chaetognatha								
5. Nematoda								
6. Copepoda	I-6	323	I-6	29			439	3136
7. Euphausiacea								
8. Appendicularia								
9. Planktonic larval forms	I-9	1					1	7
10. Others	I-10	1					1	7
11. Isopoda								
Total		328		74			624	4457

Remarks;     \*     calculated by assumption.  
                   \*\*     unidentified eggs which may be of copepods and/or benthic invertebrate.  
                   +     less than 1 indiv. /m<sup>3</sup>.

## ZOOPLANKTON RECORD SHEET

Series No. 25-006

1. Sample. No. 2501NG03                      7. Net used NORPAC(330 $\mu$ m)  
 2. JARE 25                                              8. Method of haul Vertical  
 3. Area Syowa Station                      9. Wire run out (m) 10  
 4. Station No. 1                                      10. Depth of haul (m) 10  
 5. Position 69° 00' 00" S                      11. Volume of water filtered\*(m<sup>3</sup>) 1.28  
                   39° 35' 00" E                      12. Total number per m<sup>3</sup> 26  
 6. Date & Time(LMT) 1984/7/12, 11:30-12:00

Proportion of Sample sorted	(1/1 Sample) Sort I		(/ Sample) Sort II		(/ Sample) Sort III		Indiv. No. per haul	Indiv. No. per m <sup>3</sup>
	Vial No.	Indiv. No. in vial	Vial No.	Indiv. No. in vial	Vial No.	Indiv. No. in vial		
1. Ciliata								
Foraminifera								
Copepoda, nauplius								
Eggs**								
2. Hydroida								
3. Siphonophora								
4. Chaetognatha								
5. Nematoda								
6. Copepoda	I-6	33					33	26
7. Euphausiacea								
8. Appendicularia								
9. Planktonic larval forms								
10. Others								
11. Isopoda								
Total		33					33	26

Remarks;    \*    calculated by assumption.  
                   \*\*    unidentified eggs which may be of copepods and/or benthic invertebrate.  
                   +    less than 1 indiv. /m<sup>3</sup>.

## ZOOPLANKTON RECORD SHEET

Series No. 25-007

1. Sample No. 2501NP04 7. Net used NORPAC(25 $\mu$ m)  
 2. JARE 25 8. Method of haul Vertical  
 3. Area Syowa Station 9. Wire run out (m) 10  
 4. Station No. 1 10. Depth of haul (m) 10  
 5. Position 69° 00' 00" S 11. Volume of water filtered\*(m<sup>3</sup>) 0.21  
39° 35' 00" E 12. Total number per m<sup>3</sup> 3880  
 6. Date & Time(LMT) 1984/9/10, 10:30-11:00

Proportion of Sample sorted	(1/1 Sample)		(1/5 Sample)		(/ Sample)		Indiv. No. per haul	Indiv. No. per m <sup>3</sup>
	Sort I		Sort II		Sort III			
Category	Vial No.	Indiv. No. in vial	Vial No.	Indiv. No. in vial	Vial No.	Indiv. No. in vial		
1. Ciliata			II-1	6			30	143
Foraminifera								
Copepoda, nauplius			II-1	50			250	1190
Eggs**	I-1	1	II-1	14			71	338
2. Hydroida								
3. Siphonophora								
4. Chaetognatha								
5. Nematoda								
6. Copepoda	I-6	341	I-6	24			461	2195
7. Euphausiacea								
8. Appendicularia								
9. Planktonic larval forms	I-9	3					3	14
10. Others								
11. Isopoda								
Total		345		94			815	3880

Remarks; \* calculated by assumption.  
 \*\* unidentified eggs which may be of copepods and/or benthic invertebrate.  
 + less than 1 indiv. /m<sup>3</sup>.

## ZOOPLANKTON RECORD SHEET

Series No. 25-008

1. Sample. No. 2501NG04 7. Net used NORPAC(330µm)  
 2. JARE 25 8. Method of haul Vertical  
 3. Area Syowa Station 9. Wire run out (m) 10  
 4. Station No. 1 10. Depth of haul (m) 10  
 5. Position 69° 00' 00" S 11. Volume of water filtered\*(m<sup>3</sup>) 1.94  
39° 35' 00" E 12. Total number per m<sup>3</sup> 17  
 6. Date & Time(LMT) 1984/9/10, 10:30-11:00

Proportion of Sample sorted	(1/1 Sample) Sort I		(/ Sample) Sort II		(/ Sample) Sort III		Indiv. No. per haul	Indiv. No. per m <sup>3</sup>
	Vial No.	Indiv. No. in vial	Vial No.	Indiv. No. in vial	Vial No.	Indiv. No. in vial		
1. Ciliata								
Foraminifera	I-1	1					1	1
Copepoda, nauplius								
Eggs**								
2. Hydroida								
3. Siphonophora								
4. Chaetognatha								
5. Nematoda								
6. Copepoda	I-6	30					30	15
7. Euphausiacea								
8. Appendicularia								
9. Planktonic larval forms	I-9	2					2	1
10. Others								
11. Isopoda								
Total		33					33	17

Remarks; \* calculated by assumption.  
 \*\* unidentified eggs which may be of copepods and/or benthic invertebrate.  
 + less than 1 indiv. /m<sup>3</sup>.

## ZOOPLANKTON RECORD SHEET

Series No. 25-009

1. Sample. No. 2501NP05 7. Net used NORPAC(25 $\mu$ m)  
 2. JARE 25 8. Method of haul Vertical  
 3. Area Syowa Station 9. Wire run out (m) 10  
 4. Station No. 1 10. Depth of haul (m) 10  
 5. Position 69° 00' 00" S 11. Volume of water filtered\*(m<sup>3</sup>) 0.28  
39° 35' 00" E 12. Total number per m<sup>3</sup> 2104  
 6. Date & Time(LMT) 1984/11/17, 15:30-16:00

Proportion of Sample sorted	(1/1 Sample)		(1/8 Sample)		(/ Sample)		Indiv. No. per haul	Indiv. No. per m <sup>3</sup>
	Sort I		Sort II		Sort III			
Category	Vial No.	Indiv. No. in vial	Vial No.	Indiv. No. in vial	Vial No.	Indiv. No. in vial		
1. Ciliata			II-1	2			16	57
Foraminifera								
Copepoda, nauplius			II-1	26			208	743
Eggs**			II-1	24			192	686
2. Hydroida								
3. Siphonophora								
4. Chaetognatha								
5. Nematoda								
6. Copepoda	I-6	139	I-6	3			163	582
7. Euphausiacea								
8. Appendicularia								
9. Planktonic larval forms	I-9	2	I-9	1			10	36
10. Others								
11. Isopoda								
Total		141		56			589	2104

Remarks; \* calculated by assumption.  
 \*\* unidentified eggs which may be of copepods and/or benthic invertebrate.  
 + less than 1 indiv. /m<sup>3</sup>.

## ZOOPLANKTON RECORD SHEET

Series No. 25-010

1. Sample No. 2501NG05 7. Net used NORPAC(330 $\mu$ m)  
 2. JARE 25 8. Method of haul Vertical  
 3. Area Syowa Station 9. Wire run out (m) 10  
 4. Station No. 1 10. Depth of haul (m) 10  
 5. Position 69° 00' 00" S 11. Volume of water filtered\*(m<sup>3</sup>) 2.93  
39° 35' 00" E 12. Total number per m<sup>3</sup> 15  
 6. Date & Time(LMT) 1984/11/17, 15:30-16:00

Proportion of Sample sorted	(1/1 Sample) Sort I		(/ Sample) Sort II		(/ Sample) Sort III		Indiv. No. per haul	Indiv. No. per m <sup>3</sup>
	Vial No.	Indiv. No. in vial	Vial No.	Indiv. No. in vial	Vial No.	Indiv. No. in vial		
1. Ciliata								
Foraminifera								
Copepoda, nauplius								
Eggs**	I-1	8					8	3
2. Hydroida								
3. Siphonophora								
4. Chaetognatha								
5. Nematoda								
6. Copepoda	I-6	32					32	11
7. Euphausiacea								
8. Appendicularia								
9. Planktonic larval forms	I-9	3					3	1
10. Others								
11. Isopoda								
Total		43					43	15

Remarks; \* calculated by assumption.  
 \*\* unidentified eggs which may be of copepods and/or benthic invertebrate.  
 + less than 1 indiv. /m<sup>3</sup>.

## ZOOPLANKTON RECORD SHEET

Series No. 25-011

1. Sample. No. 2501NP06 7. Net used NORPAC(25 $\mu$ m)  
 2. JARE 25 8. Method of haul Vertical  
 3. Area Syowa Station 9. Wire run out (m) 11  
 4. Station No. 1 10. Depth of haul (m) 11  
 5. Position 69° 00' 00" S 11. Volume of water filtered\*(m<sup>3</sup>) 0.28  
39° 35' 00" E 12. Total number per m<sup>3</sup> 3246  
 6. Date & Time(LMT) 1984/12/5, 11:20-11:50

Proportion of Sample sorted	(1/1 Sample)		(1/4 Sample)		(/ Sample)		Indiv. No. per haul	Indiv. No. per m <sup>3</sup>
	Sort I		Sort II		Sort III			
Category	Vial No.	Indiv. No. in vial	Vial No.	Indiv. No. in vial	Vial No.	Indiv. No. in vial		
1. Ciliata			II-1	2			8	29
Foraminifera								
Copepoda, nauplius			II-1	68			272	971
Eggs**			II-1	124			496	1771
2. Hydroida								
3. Siphonophora								
4. Chaetognatha								
5. Nematoda								
6. Copepoda	I-6	121	I-6	1			125	446
7. Euphausiacea								
8. Appendicularia								
9. Planktonic larval forms			II-9	2			8	29
10. Others								
11. Isopoda								
Total		121		197			909	3246

Remarks; \* calculated by assumption.  
 \*\* unidentified eggs which may be of copepods and/or benthic invertebrate.  
 + less than 1 indiv. /m<sup>3</sup>.



## ZOOPLANKTON RECORD SHEET

Series No. 25-012

1. Sample No. 2501NG06      7. Net used NORPAC(330µm)  
 2. JARE 25      8. Method of haul Vertical  
 3. Area Syowa Station      9. Wire run out (m) 11  
 4. Station No. 1      10. Depth of haul (m) 11  
 5. Position 69° 00' 00" S      11. Volume of water filtered\*(m<sup>3</sup>) 2.41  
                   39° 35' 00" E      12. Total number per m<sup>3</sup> 37  
 6. Date & Time(LMT) 1984/12/5, 11:20-11:50

Proportion of Sample sorted	(1/1 Sample) Sort I		(/ Sample) Sort II		(/ Sample) Sort III		Indiv. No. per haul	Indiv. No. per m <sup>3</sup>
	Vial No.	Indiv. No. in vial	Vial No.	Indiv. No. in vial	Vial No.	Indiv. No. in vial		
1. Ciliata								
Foraminifera	I-1	1					1	+
Copepoda, nauplius								
Eggs**	I-1	6					6	2
2. Hydroida								
3. Siphonophora								
4. Chaetognatha								
5. Nematoda								
6. Copepoda	I-6	81					81	34
7. Euphausiacea								
8. Appendicularia								
9. Planktonic larval forms	I-9	1					1	+
10. Others								
11. Isopoda								
Total		89					89	37

Remarks;      \*      calculated by assumption.  
                   \*\*      unidentified eggs which may be of copepods and/or benthic invertebrate.  
                   +      less than 1 indiv. /m<sup>3</sup>.

## ZOOPLANKTON RECORD SHEET

Series No. 25-013

1. Sample No. 2502NP01                      7. Net used NORPAC(25 $\mu$ m)  
 2. JARE 25                                      8. Method of haul Vertical  
 3. Area Syowa Station                      9. Wire run out (m) 30  
 4. Station No. 2                                10. Depth of haul (m) 30  
 5. Position 69° 00' 00" S                      11. Volume of water filtered\*(m<sup>3</sup>) 0.44  
                   39° 36' 00" E                      12. Total number per m<sup>3</sup> 176  
 6. Date & Time(LMT) 1984/3/16, 13:00

Proportion of Sample sorted	(1/1 Sample)		(1/3 Sample)		( / Sample)		Indiv. No. per haul	Indiv. No. per m <sup>3</sup>
	Sort I		Sort II		Sort III			
Category	Vial No.	Indiv. No. in vial	Vial No.	Indiv. No. in vial	Vial No.	Indiv. No. in vial		
1. Ciliata			II-1	14			42	95
Foraminifera								
Copepoda, nauplius			II-1	4			12	27
Eggs**			II-1	3			9	20
2. Hydroida								
3. Siphonophora								
4. Chaetognatha								
5. Nematoda								
6. Copepoda	I-6	8	I-6	2			14	32
7. Other Mollusca								
8. Appendicularia								
9. Planktonic larval forms								
10. Others	I-10	1					1	2
11. Isopoda								
Total		9		23			78	176

Remarks;    \*    calculated by assumption.  
                   \*\*    unidentified eggs which may be of copepods and/or benthic invertebrate.  
                   +    less than 1 indiv. /m<sup>3</sup>.

## ZOOPLANKTON RECORD SHEET

Series No. 25-014

1. Sample No. 2502NG01      7. Net used NORPAC(330 $\mu$ m)  
 2. JARE 25      8. Method of haul Vertical  
 3. Area Syowa Station      9. Wire run out (m) 30  
 4. Station No. 2      10. Depth of haul (m) 30  
 5. Position 69° 00' 00" S      11. Volume of water filtered\*(m<sup>3</sup>) 4.29  
                   39° 36' 00" E      12. Total number per m<sup>3</sup> 3  
 6. Date & Time(LMT) 1984/3/16, 12:05

Proportion of Sample sorted	(1/1 Sample) Sort I		(/ Sample) Sort II		(/ Sample) Sort III		Indiv. No. per haul	Indiv. No. per m <sup>3</sup>
	Vial No.	Indiv. No. in vial	Vial No.	Indiv. No. in vial	Vial No.	Indiv. No. in vial		
1. Ciliata								
Foraminifera								
Copepoda, nauplius								
Eggs**								
2. Hydroida								
3. Siphonophora								
4. Chaetognatha								
5. Nematoda								
6. Copepoda	I-6	13					13	3
7. Other Mollusca								
8. Appendicularia								
9. Planktonic larval forms								
10. Others								
11. Isopoda								
Total		13					13	3

Remarks;      \*      calculated by assumption.  
                   \*\*      unidentified eggs which may be of copepods and/or benthic invertebrate.  
                   +      less than 1 indiv. /m<sup>3</sup>.

## ZOOPLANKTON RECORD SHEET

Series No. 25-015

1. Sample. No. 2502NP02                      7. Net used NORPAC(25 $\mu$ m)  
 2. JARE 25                                              8. Method of haul Vertical  
 3. Area Syowa Station                      9. Wire run out (m) 30  
 4. Station No. 2                                      10. Depth of haul (m) 30  
 5. Position 69° 00' 00" S                      11. Volume of water filtered\*(m<sup>3</sup>) 0.43  
                   39° 36' 00" E                      12. Total number per m<sup>3</sup> 4140  
 6. Date & Time(LMT) 1984/3/19, 11:45

Proportion of Sample sorted	(1/4 Sample)		(1/12 Sample)		(/ Sample)		Indiv. No. per haul	Indiv. No. per m <sup>3</sup>
	Sort I		Sort II		Sort III			
Category	Vial No.	Indiv. No. in vial	Vial No.	Indiv. No. in vial	Vial No.	Indiv. No. in vial		
1. Ciliata			II-1	47			564	1312
Foraminifera			II-1	1			12	28
Copepoda, nauplius			II-1	43			516	1200
Eggs**			II-1	24			288	670
2. Hydroida								
3. Siphonophora								
4. Chaetognatha								
5. Nematoda	I-5	2	I-5	3			44	102
6. Copepoda	I-6	24	I-6	19			324	753
7. Other Mollusca								
8. Appendicularia			II-8	2			24	56
9. Planktonic larval forms	I-9	2					8	19
10. Others								
11. Isopoda								
Total		28		139			1780	4140

Remarks;        \*        calculated by assumption.  
                       \*\*        unidentified eggs which may be of copepods and/or benthic invertebrate.  
                       +        less than 1 indiv. /m<sup>3</sup>.

## ZOOPLANKTON RECORD SHEET

Series No. 25-016

1. Sample. No. 2502NG02      7. Net used NORPAC(330 $\mu$ m)  
 2. JARE 25      8. Method of haul Vertical  
 3. Area Syowa Station      9. Wire run out (m) 30  
 4. Station No. 2      10. Depth of haul (m) 30  
 5. Position 69° 00' 00" S      11. Volume of water filtered\*(m<sup>3</sup>) 4.21  
                   39° 36' 00" E      12. Total number per m<sup>3</sup> 1  
 6. Date & Time(LMT) 1984/3/19, 10:35

Proportion of Sample sorted	(1/1 Sample) Sort I		(/ Sample) Sort II		(/ Sample) Sort III		Indiv. No. per haul	Indiv. No. per m <sup>3</sup>
	Vial No.	Indiv. No. in vial	Vial No.	Indiv. No. in vial	Vial No.	Indiv. No. in vial		
1. Ciliata								
Foraminifera								
Copepoda, nauplius								
Eggs**								
2. Hydroida								
3. Siphonophora								
4. Chaetognatha								
5. Nematoda								
6. Copepoda	I-6	4					4	1
7. Other Mollusca								
8. Appendicularia	I-8	1					1	+
9. Planktonic larval forms	I-9	1					1	+
10. Others								
11. Isopoda								
<b>Total</b>		<b>6</b>					<b>6</b>	<b>1</b>

Remarks;      \*      calculated by assumption.  
                   \*\*      unidentified eggs which may be of copepods and/or benthic invertebrate.  
                   +      less than 1 indiv. /m<sup>3</sup>.

## ZOOPLANKTON RECORD SHEET

Series No. 25-017

1. Sample. No. 2502NP03                      7. Net used NORPAC(25 $\mu$ m)  
 2. JARE 25                                              8. Method of haul Vertical  
 3. Area Syowa Station                      9. Wire run out (m) 35  
 4. Station No. 2                                              10. Depth of haul (m) 35  
 5. Position 69° 00' 00" S                      11. Volume of water filtered\*(m<sup>3</sup>) 0.43  
                   39° 36' 00" E                      12. Total number per m<sup>3</sup> 3184  
 6. Date & Time(LMT) 1984/4/13, 11:30

Proportion of Sample sorted	(1/1 Sample)		(1/4 Sample)		(/ Sample)		Indiv. No. per haul	Indiv. No. per m <sup>3</sup>
	Sort I		Sort II		Sort III			
Category	Vial No.	Indiv. No. in vial	Vial No.	Indiv. No. in vial	Vial No.	Indiv. No. in vial		
1. Ciliata			II-1	120			480	1116
Foraminifera								
Copepoda, nauplius			II-1	154			616	1433
Eggs**								
2. Hydroida								
3. Siphonophora								
4. Chaetognatha								
5. Nematoda	I-5	3					3	7
6. Copepoda	I-6	237	I-6	6			261	607
7. Other Mollusca								
8. Appendicularia	I-8	7					7	16
9. Planktonic larval forms	I-9	2					2	5
10. Others								
11. Isopoda								
Total		249		280			1369	3184

Remarks;        \*        calculated by assumption.  
                       \*\*        unidentified eggs which may be of copepods and/or benthic invertebrate.  
                       +        less than 1 indiv. /m<sup>3</sup>.

## ZOOPLANKTON RECORD SHEET

Series No. 25-018

1. Sample No. 2502NG03      7. Net used NORPAC(330 $\mu$ m)  
 2. JARE 25      8. Method of haul Vertical  
 3. Area Syowa Station      9. Wire run out (m) 35  
 4. Station No. 2      10. Depth of haul (m) 35  
 5. Position 69° 00' 00" S      11. Volume of water filtered\*(m<sup>3</sup>) 4.92  
                   39° 36' 00" E      12. Total number per m<sup>3</sup> 5  
 6. Date & Time(LMT) 1984/4/13, 09:40

Proportion of Sample sorted	(1/1 Sample) Sort I		(/ Sample) Sort II		(/ Sample) Sort III		Indiv. No. per haul	Indiv. No. per m <sup>3</sup>
	Vial No.	Indiv. No. in vial	Vial No.	Indiv. No. in vial	Vial No.	Indiv. No. in vial		
1. Ciliata								
Foraminifera								
Copepoda, nauplius								
Eggs**								
2. Hydroida								
3. Siphonophora								
4. Chaetognatha								
5. Nematoda								
6. Copepoda	I-6	22					22	4
7. Other Mollusca	I-7	1					1	+
8. Appendicularia	I-8	3					3	1
9. Planktonic larval forms								
10. Others								
11. Isopoda								
Total		26					26	5

Remarks;      \*      calculated by assumption.  
                   \*\*      unidentified eggs which may be of copepods and/or benthic invertebrate.  
                   +      less than 1 indiv. /m<sup>3</sup>.

## ZOOPLANKTON RECORD SHEET

Series No. 25-019

1. Sample. No. 2502NP04                      7. Net used NORPAC(25 $\mu$ m)  
 2. JARE 25                                              8. Method of haul Vertical  
 3. Area Syowa Station                      9. Wire run out (m) 35  
 4. Station No. 2                                      10. Depth of haul (m) 35  
 5. Position 69° 00' 00" S                      11. Volume of water filtered\*(m<sup>3</sup>) 0.57  
                   39° 36' 00" E                      12. Total number per m<sup>3</sup> 2648  
 6. Date & Time(LMT) 1984/5/16, 14:10

Proportion of Sample sorted	(1/3 Sample)		(1/9 Sample)		(/ Sample)		Indiv. No. per haul	Indiv. No. per m <sup>3</sup>
	Sort I		Sort II		Sort III			
Category	Vial No.	Indiv. No. in vial	Vial No.	Indiv. No. in vial	Vial No.	Indiv. No. in vial		
1. Ciliata			II-1	16			144	253
Foraminifera								
Copepoda, nauplius			II-1	132			1188	2084
Eggs**			II-1	2			18	32
2. Hydroida								
3. Siphonophora								
4. Chaetognatha								
5. Nematoda								
6. Copepoda	I-6	114	I-6	5			159	279
7. Other Mollusca								
8. Appendicularia								
9. Planktonic larval forms								
10. Others								
11. Isopoda								
Total		114		155			1509	2648

Remarks;    \*    calculated by assumption.  
                   \*\*    unidentified eggs which may be of copepods and/or benthic invertebrate.  
                   +    less than 1 indiv. /m<sup>3</sup>.



## ZOOPLANKTON RECORD SHEET

Series No. 25-020

1. Sample. No. 2502NG04      7. Net used NORPAC(330 $\mu$ m)  
 2. JARE 25      8. Method of haul Vertical  
 3. Area Syowa Station      9. Wire run out (m) 35  
 4. Station No. 2      10. Depth of haul (m) 35  
 5. Position 69° 00' 00" S      11. Volume of water filtered\*(m<sup>3</sup>) 5.15  
                   39° 36' 00" E      12. Total number per m<sup>3</sup> 14  
 6. Date & Time(LMT) 1984/5/16, 13:15

Proportion of Sample sorted	(1/1 Sample) Sort I		(/ Sample) Sort II		(/ Sample) Sort III		Indiv. No. per haul	Indiv. No. per m <sup>3</sup>
	Vial No.	Indiv. No. in vial	Vial No.	Indiv. No. in vial	Vial No.	Indiv. No. in vial		
1. Ciliata								
Foraminifera	I-1	1					1	+
Copepoda, nauplius								
Eggs**								
2. Hydroida								
3. Siphonophora	I-3	1					1	+
4. Chaetognatha								
5. Nematoda								
6. Copepoda	I-6	67					67	13
7. Other Mollusca								
8. Appendicularia								
9. Planktonic larval forms								
10. Others	I-10	1					1	+
11. Isopoda								
Total		70					70	14

Remarks;      \*      calculated by assumption.  
                   \*\*      unidentified eggs which may be of copepods and/or benthic invertebrate.  
                   +      less than 1 indiv. /m<sup>3</sup>.

## ZOOPLANKTON RECORD SHEET

Series No. 25-021

1. Sample. No. 2502NP05 7. Net used NORPAC(25 $\mu$ m)  
 2. JARE 25 8. Method of haul Vertical  
 3. Area Syowa Station 9. Wire run out (m) 35  
 4. Station No. 2 10. Depth of haul (m) 35  
 5. Position 69° 00' 00" S 11. Volume of water filtered\*(m<sup>3</sup>) 0.55  
39° 36' 00" E 12. Total number per m<sup>3</sup> 2499  
 6. Date & Time(LMT) 1984/6/15, 11:30

Proportion of Sample sorted	(1/3 Sample)		(1/6 Sample)		( / Sample)		Indiv. No. per haul	Indiv. No. per m <sup>3</sup>
	Sort I		Sort II		Sort III			
Category	Vial No.	Indiv. No. in vial	Vial No.	Indiv. No. in vial	Vial No.	Indiv. No. in vial		
1. Ciliata			II-1	32			192	349
Foraminifera								
Copepoda, nauplius			II-1	112			672	1222
Eggs**	I-1	1	II-1	3			21	38
2. Hydroida								
3. Siphonophora								
4. Chaetognatha								
5. Nematoda								
6. Copepoda	I-6	154					462	840
7. Other Mollusca								
8. Appendicularia								
9. Planktonic larval forms								
10. Others								
11. Isopoda								
Total		155		147			1347	2449

Remarks; \* calculated by assumption.  
 \*\* unidentified eggs which may be of copepods and/or benthic invertebrate.  
 + less than 1 indiv. /m<sup>3</sup>.

## ZOOPLANKTON RECORD SHEET

Series No. 25-022

1. Sample. No. 2502NG05 7. Net used NORPAC(330µm)  
 2. JARE 25 8. Method of haul Vertical  
 3. Area Syowa Station 9. Wire run out (m) 33  
 4. Station No. 2 10. Depth of haul (m) 33  
 5. Position 69° 00' 00" S 11. Volume of water filtered\*(m<sup>3</sup>) 5.04  
39° 36' 00" E 12. Total number per m<sup>3</sup> 15  
 6. Date & Time(LMT) 1984/6/15, 10:30

Proportion of Sample sorted	(1/1 Sample) Sort I		(/ Sample) Sort II		(/ Sample) Sort III		Indiv. No. per haul	Indiv. No. per m <sup>3</sup>
	Vial No.	Indiv. No. in vial	Vial No.	Indiv. No. in vial	Vial No.	Indiv. No. in vial		
1. Ciliata								
Foraminifera								
Copepoda, nauplius	I-1	1					1	+
Eggs**								
2. Hydroida								
3. Siphonophora								
4. Chaetognatha	I-4	2					2	+
5. Nematoda								
6. Copepoda	I-6	73					73	14
7. Other Mollusca								
8. Appendicularia								
9. Planktonic larval forms								
10. Others								
11. Isopoda								
Total		76					76	15

Remarks; \* calculated by assumption.  
 \*\* unidentified eggs which may be of copepods and/or benthic invertebrate.  
 + less than 1 indiv. /m<sup>3</sup>.

## ZOOPLANKTON RECORD SHEET

Series No. 25-023

1. Sample No. 2502NP06 7. Net used NORPAC(25 $\mu$ m)  
 2. JARE 25 8. Method of haul Vertical  
 3. Area Syowa Station 9. Wire run out (m) 30  
 4. Station No. 2 10. Depth of haul (m) 30  
 5. Position 69° 00' 00" S 11. Volume of water filtered\*(m<sup>3</sup>) 0.56  
39° 36' 00" E 12. Total number per m<sup>3</sup> 4161  
 6. Date & Time(LMT) 1984/7/13, 12:40

Proportion of Sample sorted	(1/5 Sample)		(1/10 Sample)		( / Sample)		Indiv. No. per haul	Indiv. No. per m <sup>3</sup>
	Sort I		Sort II		Sort III			
Category	Vial No.	Indiv. No. in vial	Vial No.	Indiv. No. in vial	Vial No.	Indiv. No. in vial		
1. Ciliata			II-1	29			290	518
Foraminifera			II-1	100			1000	1786
Copepoda, nauplius			II-1	1			10	18
Eggs**								
2. Hydroida								
3. Siphonophora								
4. Chaetognatha								
5. Nematoda								
6. Copepoda	I-6	205					1025	1830
7. Other Mollusca								
8. Appendicularia	I-8	1					5	9
9. Planktonic larval forms								
10. Others								
11. Isopoda								
Total		206		130			2330	4161

Remarks; \* calculated by assumption.  
 \*\* unidentified eggs which may be of copepods and/or benthic invertebrate.  
 + less than 1 indiv. /m<sup>3</sup>.

## ZOOPLANKTON RECORD SHEET

Series No. 25-024

1. Sample No. 2502NG06      7. Net used NORPAC(330 $\mu$ m)  
 2. JARE 25      8. Method of haul Vertical  
 3. Area Syowa Station      9. Wire run out (m) 30  
 4. Station No. 2      10. Depth of haul (m) 30  
 5. Position 69° 00' 00" S      11. Volume of water filtered\*(m<sup>3</sup>) 5.09  
                   39° 36' 00" E      12. Total number per m<sup>3</sup> 29  
 6. Date & Time(LMT) 1984/7/13, 11:30

Proportion of Sample sorted	(1/1 Sample)		(/ Sample)		(/ Sample)		Indiv. No. per haul	Indiv. No. per m <sup>3</sup>
	Sort I		Sort II		Sort III			
Category	Vial No.	Indiv. No. in vial	Vial No.	Indiv. No. in vial	Vial No.	Indiv. No. in vial		
1. Ciliata								
Foraminifera								
Copepoda, nauplius								
Eggs**								
2. Hydroida								
3. Siphonophora								
4. Chaetognatha								
5. Nematoda								
6. Copepoda	I-6	148					148	29
7. Other Mollusca								
8. Appendicularia								
9. Planktonic larval forms	I-9	1					1	+
10. Others								
11. Isopoda								
Total		149					149	29

Remarks;      \*      calculated by assumption.  
                   \*\*      unidentified eggs which may be of copepods and/or benthic invertebrate.  
                   +      less than 1 indiv. /m<sup>3</sup>.

## ZOOPLANKTON RECORD SHEET

Series No. 25-025

1. Sample. No. 2502NP07 7. Net used NORPAC(25 $\mu$ m)  
 2. JARE 25 8. Method of haul Vertical  
 3. Area Syowa Station 9. Wire run out (m) 32  
 4. Station No. 2 10. Depth of haul (m) 32  
 5. Position 69° 00' 00" S 11. Volume of water filtered\*(m<sup>3</sup>) 0.63  
39° 36' 00" E 12. Total number per m<sup>3</sup> 5078  
 6. Date & Time(LMT) 1984/9/10, 13:15

Proportion of Sample sorted	(1/4 Sample)		(1/8 Sample)		(/ Sample)		Indiv. No. per haul	Indiv. No. per m <sup>3</sup>
	Sort I		Sort II		Sort III			
Category	Vial No.	Indiv. No. in vial	Vial No.	Indiv. No. in vial	Vial No.	Indiv. No. in vial		
1. Ciliata			II-1	26			208	330
Foraminifera								
Copepoda, nauplius			II-1	251			2008	3187
Eggs**			II-1	22			176	279
2. Hydroida								
3. Siphonophora								
4. Chaetognatha								
5. Nematoda								
6. Copepoda	I-6	195	I-6	3			804	1276
7. Other Mollusca								
8. Appendicularia								
9. Planktonic larval forms	I-9	1					4	6
10. Others								
11. Isopoda								
Total		196		302			3200	5078

Remarks; \* calculated by assumption.  
 \*\* unidentified eggs which may be of copepods and/or benthic invertebrate.  
 + less than 1 indiv. /m<sup>3</sup>.

## ZOOPLANKTON RECORD SHEET

Series No. 25-026

1. Sample No. 2502NG07-1      7. Net used NORPAC(330 $\mu$ m)  
 2. JARE 25      8. Method of haul Vertical  
 3. Area Syowa Station      9. Wire run out (m) 32  
 4. Station No. 2      10. Depth of haul (m) 32  
 5. Position 69° 00' 00" S      11. Volume of water filtered\*(m<sup>3</sup>) 5.73  
                   39° 36' 00" E      12. Total number per m<sup>3</sup> 18  
 6. Date & Time(LMT) 1984/9/10, 11:52

Proportion of Sample sorted	(1/1 Sample) Sort I		(/ Sample) Sort II		(/ Sample) Sort III		Indiv. No. per haul	Indiv. No. per m <sup>3</sup>
	Vial No.	Indiv. No. in vial	Vial No.	Indiv. No. in vial	Vial No.	Indiv. No. in vial		
1. Ciliata								
Foraminifera								
Copepoda, nauplius								
Eggs**								
2. Hydroida								
3. Siphonophora								
4. Chaetognatha								
5. Nematoda								
6. Copepoda	I-6	102					102	18
7. Other Mollusca								
8. Appendicularia	I-8	2					2	+
9. Planktonic larval forms								
10. Others								
11. Isopoda								
Total		104					104	18

Remarks;      \*      calculated by assumption.  
                   \*\*      unidentified eggs which may be of copepods and/or benthic invertebrate.  
                   +      less than 1 indiv. /m<sup>3</sup>.

## ZOOPLANKTON RECORD SHEET

Series No. 25-027

1. Sample. No. 2502NG07-2      7. Net used NORPAC(330µm)  
 2. JARE 25      8. Method of haul Vertical  
 3. Area Syowa Station      9. Wire run out (m) 32  
 4. Station No. 2      10. Depth of haul (m) 32  
 5. Position 69° 00' 00" S      11. Volume of water filtered\*(m<sup>3</sup>) 5.73  
                   39° 36' 00" E      12. Total number per m<sup>3</sup> 14  
 6. Date & Time(LMT) 1984/9/10, 11:52

Proportion of Sample sorted	(1/1 Sample)		(/ Sample)		(/ Sample)		Indiv. No. per haul	Indiv. No. per m <sup>3</sup>
	Sort I		Sort II		Sort III			
Category	Vial No.	Indiv. No. in vial	Vial No.	Indiv. No. in vial	Vial No.	Indiv. No. in vial		
1. Ciliata								
Foraminifera								
Copepoda, nauplius								
Eggs**								
2. Hydroida								
3. Siphonophora								
4. Chaetognatha								
5. Nematoda								
6. Copepoda	I-6	82					82	14
7. Other Mollusca								
8. Appendicularia	I-8	1					1	+
9. Planktonic larval forms								
10. Others								
11. Isopoda								
Total		83					83	14

Remarks;      \*      calculated by assumption.  
                   \*\*      unidentified eggs which may be of copepods and/or benthic invertebrate.  
                   +      less than 1 indiv. /m<sup>3</sup>.



## ZOOPLANKTON RECORD SHEET

Series No. 25-028

1. Sample No. 2502NP08      7. Net used NORPAC(25µm)  
 2. JARE 25      8. Method of haul Vertical  
 3. Area Syowa Station      9. Wire run out (m) 30  
 4. Station No. 2      10. Depth of haul (m) 30  
 5. Position 69° 00' 00" S      11. Volume of water filtered\*(m<sup>3</sup>) 0.66  
                   39° 36' 00" E      12. Total number per m<sup>3</sup> 1270  
 6. Date & Time(LMT) 1984/10/9, 11:40

Proportion of Sample sorted	(1/1 Sample) Sort I		(1/3 Sample) Sort II		( / Sample) Sort III		Indiv. No. per haul	Indiv. No. per m <sup>3</sup>
	Vial No.	Indiv. No. in vial	Vial No.	Indiv. No. in vial	Vial No.	Indiv. No. in vial		
1. Ciliata			II-1	6			18	27
Foraminifera								
Copepoda, nauplius			II-1	61			183	277
Eggs**			II-1	81			243	368
2. Hydroida								
3. Siphonophora								
4. Chaetognatha								
5. Nematoda								
6. Copepoda	I-6	300	I-6	28			384	582
7. Other Mollusca								
8. Appendicularia			II-8	1			3	5
9. Planktonic larval forms	I-9	4	I-9	1			7	11
10. Others								
11. Isopoda								
Total		304		178			838	1270

Remarks;      \*      calculated by assumption.  
                   \*\*      unidentified eggs which may be of copepods and/or benthic invertebrate.  
                   +      less than 1 indiv. /m<sup>3</sup>.

## ZOOPLANKTON RECORD SHEET

Series No. 25-029

1. Sample. No. <u>2502NG08</u>	7. Net used <u>NORPAC(330<math>\mu</math>m)</u>
2. JARE <u>25</u>	8. Method of haul <u>Vertical</u>
3. Area <u>Syowa Station</u>	9. Wire run out (m) <u>30</u>
4. Station No. <u>2</u>	10. Depth of haul (m) <u>30</u>
5. Position <u>69° 00' 00" S</u>	11. Volume of water filtered*(m <sup>3</sup> ) <u>5.99</u>
<u>39° 36' 00" E</u>	12. Total number per m <sup>3</sup> <u>20</u>
6. Date & Time(LMT) <u>1984/10/9, 10:30</u>	

Proportion of Sample sorted	(1/1 Sample) Sort I		(/ Sample) Sort II		(/ Sample) Sort III		Indiv. No. per haul	Indiv. No. per m <sup>3</sup>
	Vial No.	Indiv. No. in vial	Vial No.	Indiv. No. in vial	Vial No.	Indiv. No. in vial		
1. Ciliata								
Foraminifera								
Copepoda, nauplius								
Eggs**	I-1	7					7	1
2. Hydroida								
3. Siphonophora								
4. Chaetognatha								
5. Nematoda								
6. Copepoda	I-6	109					109	18
7. Other Mollusca								
8. Appendicularia	I-8	1					1	+
9. Planktonic larval forms	I-9	1					1	+
10. Others								
11. Isopoda								
Total		118					118	20

Remarks; \* calculated by assumption.  
 \*\* unidentified eggs which may be of copepods and/or benthic invertebrate.  
 + less than 1 indiv. /m<sup>3</sup>.

## ZOOPLANKTON RECORD SHEET

Series No. 25-030

1. Sample No. 2502NP09      7. Net used NORPAC(25µm)  
 2. JARE 25      8. Method of haul Vertical  
 3. Area Syowa Station      9. Wire run out (m) 34  
 4. Station No. 2      10. Depth of haul (m) 34  
 5. Position 69° 00' 00" S      11. Volume of water filtered\*(m<sup>3</sup>) 0.39  
     39° 36' 00" E      12. Total number per m<sup>3</sup> 2751  
 6. Date & Time(LMT) 1984/11/17, 10:40

Proportion of Sample sorted	(1/1 Sample)		(1/3 Sample)		(/ Sample)		Indiv. No. per haul	Indiv. No. per m <sup>3</sup>
	Sort I		Sort II		Sort III			
Category	Vial No.	Indiv. No. in vial	Vial No.	Indiv. No. in vial	Vial No.	Indiv. No. in vial		
1. Ciliata			II-1	1			3	8
Foraminifera								
Copepoda, nauplius			II-1	279			837	2146
Eggs**	I-1	19	II-1	9			46	118
2. Hydroida								
3. Siphonophora								
4. Chaetognatha								
5. Nematoda								
6. Copepoda	I-6	104	I-6	17			155	397
7. Other Mollusca								
8. Appendicularia								
9. Planktonic larval forms	I-9	5	I-9	9			32	82
11. Isopoda								
Total		128		315			1073	2751

Remarks; \* calculated by assumption.  
 \*\* unidentified eggs which may be of copepods and/or benthic invertebrate.  
 + less than 1 indiv. /m<sup>3</sup>.

## ZOOPLANKTON RECORD SHEET

Series No. 25-031

1. Sample. No. 2502NG09                      7. Net used NORPAC(330 $\mu$ m)  
 2. JARE 25                                              8. Method of haul Vertical  
 3. Area Syowa Station                      9. Wire run out (m) 34  
 4. Station No. 2                                      10. Depth of haul (m) 34  
 5. Position 69° 00' 00" S                      11. Volume of water filtered\*(m<sup>3</sup>) 4.24  
                   39° 36' 00" E                      12. Total number per m<sup>3</sup> 12  
 6. Date & Time(LMT) 1984/11/17, 09:35

Proportion of Sample sorted	(1/1 Sample) Sort I		(/ Sample) Sort II		(/ Sample) Sort III		Indiv. No. per haul	Indiv. No. per m <sup>3</sup>
	Vial No.	Indiv. No. in vial	Vial No.	Indiv. No. in vial	Vial No.	Indiv. No. in vial		
1. Ciliata								
Foraminifera								
Copepoda, nauplius								
Eggs**	I-1	13					13	3
2. Hydroida								
3. Siphonophora								
4. Chaetognatha								
5. Nematoda	I-5	1					1	+
6. Copepoda	I-6	34					34	8
7. Other Mollusca								
8. Appendicularia								
9. Planktonic larval forms	I-9	2					2	+
10. Others								
11. Isopoda								
Total		50					50	12

Remarks;        \*        calculated by assumption.  
                       \*\*        unidentified eggs which may be of copepods and/or benthic invertebrate.  
                       +        less than 1 indiv. /m<sup>3</sup>.

## ZOOPLANKTON RECORD SHEET

Series No. 25-032

1. Sample. No. 2502NP10                      7. Net used NORPAC(25 $\mu$ m)  
 2. JARE 25                                              8. Method of haul Vertical  
 3. Area Syowa Station                      9. Wire run out (m) 34  
 4. Station No. 2                                      10. Depth of haul (m) 34  
 5. Position 69° 00' 00" S                      11. Volume of water filtered\*(m<sup>3</sup>) 0.50  
                   39° 36' 00" E                      12. Total number per m<sup>3</sup> 1518  
 6. Date & Time(LMT) 1984/12/5, 09:50

Proportion of Sample sorted	(1/1 Sample)		(1/3 Sample)		(/ Sample)		Indiv. No. per haul	Indiv. No. per m <sup>3</sup>
	Sort I		Sort II		Sort III			
Category	Vial No.	Indiv. No. in vial	Vial No.	Indiv. No. in vial	Vial No.	Indiv. No. in vial		
1. Ciliata								
Foraminifera								
Copepoda, nauplius			II-1	161			483	966
Eggs**			II-1	18			54	108
2. Hydroida								
3. Siphonophora								
4. Chaetognatha								
5. Nematoda								
6. Copepoda	I-6	176	I-6	12			212	424
7. Other Mollusca								
8. Appendicularia								
9. Planktonic larval forms	I-9	10					10	20
10. Others								
11. Isopoda								
Total		186		191			759	1518

Remarks;     \*     calculated by assumption.  
                   \*\*     unidentified eggs which may be of copepods and/or benthic invertebrate.  
                   +     less than 1 indiv. /m<sup>3</sup>.



## ZOOPLANKTON RECORD SHEET

Series No. 25-034

1. Sample. No. 2502NP11                      7. Net used NORPAC(25 $\mu$ m)  
 2. JARE 25                                              8. Method of haul Vertical  
 3. Area Syowa Station                      9. Wire run out (m) 30  
 4. Station No. 2                                      10. Depth of haul (m) 30  
 5. Position 69° 00' 00" S                      11. Volume of water filtered\*(m<sup>3</sup>) 0.29  
                   39° 36' 00" E                      12. Total number per m<sup>3</sup> 3440  
 6. Date & Time(LMT) 1985/1/6, 12:00

Proportion of Sample sorted	(1/2 Sample)		(1/10 Sample)		(/ Sample)		Indiv. No. per haul	Indiv. No. per m <sup>3</sup>
	Sort I		Sort II		Sort III			
Category	Vial No.	Indiv. No. in vial	Vial No.	Indiv. No. in vial	Vial No.	Indiv. No. in vial		
1. Ciliata								
Foraminifera								
Copepoda, nauplius			II-1	45			450	1552
Eggs**			II-1	11			110	379
2. Hydroida								
3. Siphonophora								
4. Chaetognatha								
5. Nematoda								
6. Copepoda	I-6	68	I-6	28			416	1434
7. Other Mollusca								
8. Appendicularia	I-8	1	I-8	1			12	41
9. Planktonic larval forms			II-9	1			10	34
10. Others								
11. Isopoda								
Total		67		86			997	3440

Remarks;        \*        calculated by assumption.  
                       \*\*        unidentified eggs which may be of copepods and/or benthic invertebrate.  
                       +        less than 1 indiv. /m<sup>3</sup>.

## ZOOPLANKTON RECORD SHEET

Series No. 25-035

1. Sample. No. 2502NG11                      7. Net used NORPAC(330 $\mu$ m)  
 2. JARE 25                                              8. Method of haul Vertical  
 3. Area Syowa Station                      9. Wire run out (m) 33  
 4. Station No. 2                                      10. Depth of haul (m) 33  
 5. Position 69° 00' 00" S                      11. Volume of water filtered\*(m<sup>3</sup>) 5.95  
                   39° 36' 00" E                      12. Total number per m<sup>3</sup> 6  
 6. Date & Time(LMT) 1985/1/6, 10:55

Proportion of Sample sorted	(1/1 Sample) Sort I		(/ Sample) Sort II		(/ Sample) Sort III		Indiv. No. per haul	Indiv. No. per m <sup>3</sup>
	Vial No.	Indiv. No. in vial	Vial No.	Indiv. No. in vial	Vial No.	Indiv. No. in vial		
1. Ciliata								
Foraminifera								
Copepoda, nauplius								
Eggs**	I-1	1					1	+
2. Hydroida								
3. Siphonophora								
4. Chaetognatha	I-4	1					1	+
5. Nematoda								
6. Copepoda	I-6	21					21	4
7. Other Mollusca								
8. Appendicularia	I-8	3					3	1
9. Planktonic larval forms	I-9	3					3	1
10. Others								
11. Isopoda								
Total		29					29	6

Remarks;    \*    calculated by assumption.  
                   \*\*    unidentified eggs which may be of copepods and/or benthic invertebrate.  
                   +    less than 1 indiv. /m<sup>3</sup>.



## ZOOPLANKTON RECORD SHEET

Series No. 25-036

1. Sample. No. 2503NG01                      7. Net used NORPAC(330 $\mu$ m)  
 2. JARE 25                                              8. Method of haul Vertical  
 3. Area Syowa Station                      9. Wire run out (m) 35  
 4. Station No. 3                                      10. Depth of haul (m) 35  
 5. Position 68° 59' 57" S                      11. Volume of water filtered\*(m<sup>3</sup>) 5.01  
                   39° 37' 16" E                      12. Total number per m<sup>3</sup> 559  
 6. Date & Time(LMT) 1984/2/18, 16:10

Proportion of Sample sorted	(1/4 Sample)		(1/22 Sample)		(/ Sample)		Indiv. No. per haul	Indiv. No. per m <sup>3</sup>
	Sort I		Sort II		Sort III			
Category	Vial No.	Indiv. No. in vial	Vial No.	Indiv. No. in vial	Vial No.	Indiv. No. in vial		
1. Ciliata			II-1	30			660	132
Foraminifera								
Copepoda, nauplius			II-1	25			550	110
Eggs**			II-1	29			638	127
2. Hydroida								
3. Siphonophora								
4. Chaetognatha								
5. Nematoda								
6. Copepoda	I-6	122	I-6	7			642	128
7. Other Mollusca								
8. Appendicularia	I-8	5	I-8	13			306	61
9. Planktonic larval forms	I-9	1					4	1
10. Others								
11. Isopoda								
Total		128		104			2800	559

Remarks;    \*    calculated by assumption.  
                   \*\*    unidentified eggs which may be of copepods and/or benthic invertebrate.  
                   +    less than 1 indiv. /m<sup>3</sup>.

## ZOOPLANKTON RECORD SHEET

Series No. 25-037

1. Sample. No. 2503NP01 7. Net used NORPAC(25 $\mu$ m)  
 2. JARE 25 8. Method of haul Vertical  
 3. Area Syowa Station 9. Wire run out (m) 60  
 4. Station No. 3 10. Depth of haul (m) 60  
 5. Position 68° 59' 57" S 11. Volume of water filtered\*(m<sup>3</sup>) 0.97  
39° 37' 16" E 12. Total number per m<sup>3</sup> 4542  
 6. Date & Time(LMT) 1984/5/18, 13:00

Proportion of Sample sorted	(1/7 Sample) Sort I		(1/26 Sample) Sort II		( / Sample) Sort III		Indiv. No. per haul	Indiv. No. per m <sup>3</sup>
	Vial No.	Indiv. No. in vial	Vial No.	Indiv. No. in vial	Vial No.	Indiv. No. in vial		
1. Ciliata			II-1	30			780	804
Foraminifera								
Copepoda, nauplius			II-1	89			2314	2386
Eggs**			II-1	7			182	188
2. Hydroida								
3. Siphonophora								
4. Chaetognatha								
5. Nematoda								
6. Copepoda	I-6	139	I-6	6			1129	1164
7. Other Mollusca								
8. Appendicularia								
9. Planktonic larval forms								
10. Others								
11. Isopoda								
Total		139		132			4405	4542

Remarks; \* calculated by assumption.  
 \*\* unidentified eggs which may be of copepods and/or benthic invertebrate.  
 + less than 1 indiv. /m<sup>3</sup>.



## ZOOPLANKTON RECORD SHEET

Series No. 25-039

1. Sample No. 2503NP02                      7. Net used NORPAC(25µm)  
 2. JARE 25                                      8. Method of haul Vertical  
 3. Area Syowa Station                      9. Wire run out (m) 42  
 4. Station No. 3                                10. Depth of haul (m) 42  
 5. Position 68° 59' 57" S                      11. Volume of water filtered\*(m<sup>3</sup>) 0.69  
               39° 37' 16" E                      12. Total number per m<sup>3</sup> 3762  
 6. Date & Time(LMT) 1984/6/14, 14:00

Proportion of Sample sorted	(1/4 Sample)		(1/7 Sample)		(/ Sample)		Indiv. No. per haul	Indiv. No. per m <sup>3</sup>
	Sort I		Sort II		Sort III			
Category	Vial No.	Indiv. No. in vial	Vial No.	Indiv. No. in vial	Vial No.	Indiv. No. in vial		
1. Ciliata			II-1	24			168	243
Foraminifera								
Copepoda, nauplius			II-1	182			1274	1846
Eggs**			II-1	8			56	81
2. Hydroida								
3. Siphonophora								
4. Chaetognatha								
5. Nematoda								
6. Copepoda	I-6	263	I-6	6			1094	1586
7. Other Mollusca								
8. Appendicularia								
9. Planktonic larval forms	I-9	1					4	6
10. Others								
11. Isopoda								
Total		264		220			2596	3762

Remarks;    \*    calculated by assumption.  
                   \*\*    unidentified eggs which may be of copepods and/or benthic invertebrate.  
                   +    less than 1 indiv. /m<sup>3</sup>.

## ZOOPLANKTON RECORD SHEET

Series No. 25-040

1. Sample No. 2503NG03      7. Net used NORPAC(330µm)  
 2. JARE 25      8. Method of haul Vertical  
 3. Area Syowa Station      9. Wire run out (m) 42  
 4. Station No. 3      10. Depth of haul (m) 42  
 5. Position 68° 59' 57" S      11. Volume of water filtered\*(m<sup>3</sup>) 6.26  
39° 37' 16" E      12. Total number per m<sup>3</sup> 21  
 6. Date & Time(LMT) 1984/6/14, 12:45

Proportion of Sample sorted	(1/1 Sample) Sort I		(/ Sample) Sort II		(/ Sample) Sort III		Indiv. No. per haul	Indiv. No. per m <sup>3</sup>
	Vial No.	Indiv. No. in vial	Vial No.	Indiv. No. in vial	Vial No.	Indiv. No. in vial		
1. Ciliata								
Foraminifera								
Copepoda, nauplius								
Eggs**								
2. Hydroida								
3. Siphonophora								
4. Chaetognatha	I-4	1					1	+
5. Nematoda								
6. Copepoda	I-6	128					128	20
7. Other Mollusca								
8. Appendicularia	I-8	1					1	+
9. Planktonic larval forms	I-9	1					1	+
10. Others								
11. Isopoda								
Total		131					131	21

Remarks;      \*      calculated by assumption.  
                      \*\*      unidentified eggs which may be of copepods and/or benthic invertebrate.  
                      +      less than 1 indiv. /m<sup>3</sup>.

## ZOOPLANKTON RECORD SHEET

Series No. 25-041

1. Sample No. 2503NP03 7. Net used NORPAC(25 $\mu$ m)  
 2. JARE 25 8. Method of haul Vertical  
 3. Area Syowa Station 9. Wire run out (m) 40  
 4. Station No. 3 10. Depth of haul (m) 40  
 5. Position 68° 59' 57" S 11. Volume of water filtered\*(m<sup>3</sup>) 0.74  
39° 37' 16" E 12. Total number per m<sup>3</sup> 2411  
 6. Date & Time(LMT) 1984/7/14, 12:40

Proportion of Sample sorted	(1/7 Sample)		(1/14 Sample)		(/ Sample)		Indiv. No. per haul	Indiv. No. per m <sup>3</sup>
	Sort I		Sort II		Sort III			
Category	Vial No.	Indiv. No. in vial	Vial No.	Indiv. No. in vial	Vial No.	Indiv. No. in vial		
1. Ciliata			II-1	25			350	473
Foraminifera								
Copepoda, nauplius			II-1	31			434	586
Eggs**			II-1	12			168	227
2. Hydroida								
3. Siphonophora	I-3	1					7	9
4. Chaetognatha								
5. Nematoda								
6. Copepoda	I-6	117					819	1107
7. Other Mollusca								
8. Appendicularia	I-8	1					7	9
9. Planktonic larval forms								
10. Others								
11. Isopoda								
Total		119		68			1785	2411

Remarks; \* calculated by assumption.  
 \*\* unidentified eggs which may be of copepods and/or benthic invertebrate.  
 + less than 1 indiv. /m<sup>3</sup>.

## ZOOPLANKTON RECORD SHEET

Series No. 25-042

1. Sample. No. 2503NG04 7. Net used NORPAC(330µm)  
 2. JARE 25 8. Method of haul Vertical  
 3. Area Syowa Station 9. Wire run out (m) 40  
 4. Station No. 3 10. Depth of haul (m) 40  
 5. Position 68° 59' 57" S 11. Volume of water filtered\*(m<sup>3</sup>) 5.44  
39° 37' 16" E 12. Total number per m<sup>3</sup> 20  
 6. Date & Time(LMT) 1984/7/14, 11:30

Proportion of Sample sorted	(1/1 Sample) Sort I		(/ Sample) Sort II		(/ Sample) Sort III		Indiv. No. per haul	Indiv. No. per m <sup>3</sup>
	Vial No.	Indiv. No. in vial	Vial No.	Indiv. No. in vial	Vial No.	Indiv. No. in vial		
1. Ciliata								
Foraminifera								
Copepoda, nauplius								
Eggs**								
2. Hydroida	I-2	2					2	+
3. Siphonophora								
4. Chaetognatha	I-4	1					1	+
5. Nematoda								
6. Copepoda	I-6	95					95	17
7. Other Mollusca								
8. Appendicularia	I-8	2					2	+
9. Planktonic larval forms	I-9	8					8	1
10. Others								
11. Isopoda								
Total		108					108	20

Remarks; \* calculated by assumption.  
 \*\* unidentified eggs which may be of copepods and/or benthic invertebrate.  
 + less than 1 indiv. /m<sup>3</sup>.

## ZOOPLANKTON RECORD SHEET

Series No. 25-043

1. Sample. No. 2503NP04 7. Net used NORPAC(25 $\mu$ m)  
 2. JARE 25 8. Method of haul Vertical  
 3. Area Syowa Station 9. Wire run out (m) 35  
 4. Station No. 3 10. Depth of haul (m) 35  
 5. Position 68° 59' 57" S 11. Volume of water filtered\*(m<sup>3</sup>) 0.62  
39° 37' 16" E 12. Total number per m<sup>3</sup> 1103  
 6. Date & Time(LMT) 1984/9/6, 15:40

Proportion of Sample sorted	(1/3 Sample)		(1/8 Sample)		(/ Sample)		Indiv. No. per haul	Indiv. No. per m <sup>3</sup>
	Sort I		Sort II		Sort III			
Category	Vial No.	Indiv. No. in vial	Vial No.	Indiv. No. in vial	Vial No.	Indiv. No. in vial		
1. Ciliata			II-1	14			112	181
Foraminifera			II-1	1			8	13
Copepoda, nauplius			II-1	23			184	297
Eggs**			II-1	2			16	26
2. Hydroida								
3. Siphonophora								
4. Chaetognatha								
5. Nematoda								
6. Copepoda	I-6	117					351	566
7. Other Mollusca								
8. Appendicularia	I-8	1					3	5
9. Planktonic larval forms	I-9	2					6	10
10. Others	I-10	1					3	5
11. Isopoda								
Total		121		40			683	1103

Remarks; \* calculated by assumption.  
 \*\* unidentified eggs which may be of copepods and/or benthic invertebrate.  
 + less than 1 indiv. /m<sup>3</sup>.



## ZOOPLANKTON RECORD SHEET

Series No. 25-044

1. Sample. No. 2503NG05      7. Net used NORPAC(330 $\mu$ m)  
 2. JARE 25      8. Method of haul Vertical  
 3. Area Syowa Station      9. Wire run out (m) 35  
 4. Station No. 3      10. Depth of haul (m) 35  
 5. Position 68° 59' 57" S      11. Volume of water filtered\*(m<sup>3</sup>) 5.61  
                   39° 37' 16" E      12. Total number per m<sup>3</sup> 24  
 6. Date & Time(LMT) 1984/9/6, 14:40

Proportion of Sample sorted	(1/1 Sample) Sort I		(/ Sample) Sort II		(/ Sample) Sort III		Indiv. No. per haul	Indiv. No. per m <sup>3</sup>
	Vial No.	Indiv. No. in vial	Vial No.	Indiv. No. in vial	Vial No.	Indiv. No. in vial		
1. Ciliata								
Foraminifera								
Copepoda, nauplius								
Eggs**								
2. Hydroida	I-2	1					1	+
3. Siphonophora								
4. Chaetognatha								
5. Nematoda								
6. Copepoda	I-6	69					69	12
7. Other Mollusca								
8. Appendicularia	I-8	4					4	1
9. Planktonic larval forms	I-9	57					57	10
10. Others	I-10	2					2	+
11. Isopoda	I-11	2					2	+
Total		135					135	24

Remarks;      \*      calculated by assumption.  
                   \*\*      unidentified eggs which may be of copepods and/or benthic invertebrate.  
                   +      less than 1 indiv. /m<sup>3</sup>.



## ZOOPLANKTON RECORD SHEET

Series No. 25-046

1. Sample. No. 2503NG06      7. Net used NORPAC(330 $\mu$ m)  
 2. JARE 25      8. Method of haul Vertical  
 3. Area Syowa Station      9. Wire run out (m) 35  
 4. Station No. 3      10. Depth of haul (m) 35  
 5. Position 68° 59' 57" S      11. Volume of water filtered\*(m<sup>3</sup>) 5.22  
                   39° 37' 16" E      12. Total number per m<sup>3</sup> 30  
 6. Date & Time(LMT) 1984/10/8, 14:30

Proportion of Sample sorted	(1/1 Sample) Sort I		(/ Sample) Sort II		(/ Sample) Sort III		Indiv. No. per haul	Indiv. No. per m <sup>3</sup>
	Vial No.	Indiv. No. in vial	Vial No.	Indiv. No. in vial	Vial No.	Indiv. No. in vial		
1. Ciliata								
Foraminifera								
Copepoda, nauplius								
Eggs**								
2. Hydroida								
3. Siphonophora								
4. Chaetognatha								
5. Nematoda								
6. Copepoda	I-6	127					127	24
7. Other Mollusca								
8. Appendicularia	I-8	5					5	1
9. Planktonic larval forms	I-9	24					24	5
10. Others								
11. Isopoda								
Total		156					156	30

Remarks;      \*      calculated by assumption.  
                   \*\*      unidentified eggs which may be of copepods and/or benthic invertebrate.  
                   +      less than 1 indiv. /m<sup>3</sup>.

## ZOOPLANKTON RECORD SHEET

Series No. 25-047

1. Sample. No. 2503NP06 7. Net used NORPAC(25 $\mu$ m)  
 2. JARE 25 8. Method of haul Vertical  
 3. Area Syowa Station 9. Wire run out (m) 35  
 4. Station No. 3 10. Depth of haul (m) 35  
 5. Position 68° 59' 57" S 11. Volume of water filtered\*(m<sup>3</sup>) 0.57  
39° 37' 16" E 12. Total number per m<sup>3</sup> 3857  
 6. Date & Time(LMT) 1984/11/15, 15:30

Proportion of Sample sorted	(1/2 Sample)		(1/14 Sample)		(/ Sample)		Indiv. No. per haul	Indiv. No. per m <sup>3</sup>
	Sort I		Sort II		Sort III			
Category	Vial No.	Indiv. No. in vial	Vial No.	Indiv. No. in vial	Vial No.	Indiv. No. in vial		
1. Ciliata								
Foraminifera			II-1	2			28	49
Copepoda, nauplius			II-1	126			1764	3095
Eggs**	I-1	10					20	35
2. Hydroida								
3. Siphonophora								
4. Chaetognatha								
5. Nematoda								
6. Copepoda	I-6	172					344	604
7. Other Mollusca								
8. Appendicularia								
9. Planktonic larval forms	I-9	21					42	74
10. Others								
11. Isopoda								
Total		203		128			2198	3857

Remarks; \* calculated by assumption.  
 \*\* unidentified eggs which may be of copepods and/or benthic invertebrate.  
 + less than 1 indiv. /m<sup>3</sup>.

## ZOOPLANKTON RECORD SHEET

Series No. 25-048

1. Sample. No. 2503NG07      7. Net used NORPAC(330 $\mu$ m)  
 2. JARE 25      8. Method of haul Vertical  
 3. Area Syowa Station      9. Wire run out (m) 35  
 4. Station No. 3      10. Depth of haul (m) 35  
 5. Position 68° 59' 57" S      11. Volume of water filtered\*(m<sup>3</sup>) 5.46  
                   39° 37' 16" E      12. Total number per m<sup>3</sup> 21  
 6. Date & Time(LMT) 1984/11/15, 14:00

Proportion of Sample sorted	(1/1 Sample) Sort I		(/ Sample) Sort II		(/ Sample) Sort III		Indiv. No. per haul	Indiv. No. per m <sup>3</sup>
	Vial No.	Indiv. No. in vial	Vial No.	Indiv. No. in vial	Vial No.	Indiv. No. in vial		
1. Ciliata								
Foraminifera								
Copepoda, nauplius								
Eggs**								
2. Hydroida								
3. Siphonophora								
4. Chaetognatha								
5. Nematoda								
6. Copepoda	I-6	76					76	14
7. Other Mollusca								
8. Appendicularia	I-8	2					2	+
9. Planktonic larval forms	I-9	37					37	7
10. Others								
11. Isopoda								
Total		115					115	21

Remarks;      \*      calculated by assumption.  
                   \*\*      unidentified eggs which may be of copepods and/or benthic invertebrate.  
                   +      less than 1 indiv. /m<sup>3</sup>.

## ZOOPLANKTON RECORD SHEET

Series No. 25-049

1. Sample No. 2503NP07      7. Net used NORPAC(25 $\mu$ m)  
 2. JARE 25      8. Method of haul Vertical  
 3. Area Syowa Station      9. Wire run out (m) 37  
 4. Station No. 3      10. Depth of haul (m) 37  
 5. Position 68° 59' 57" S      11. Volume of water filtered\*(m<sup>3</sup>) 0.57  
                   39° 37' 16" E      12. Total number per m<sup>3</sup> 3143  
 6. Date & Time(LMT) 1984/12/4, 15:10

Proportion of Sample sorted	(1/4 Sample)		(1/12 Sample)		(/ Sample)		Indiv. No. per haul	Indiv. No. per m <sup>3</sup>
	Sort I		Sort II		Sort III			
Category	Vial No.	Indiv. No. in vial	Vial No.	Indiv. No. in vial	Vial No.	Indiv. No. in vial		
1. Ciliata			II-1	1			12	21
Foraminifera	I-1	1	II-1	1			16	28
Copepoda, nauplius			II-1	117			1404	2463
Eggs**	I-1	6					24	42
2. Hydroida								
3. Siphonophora								
4. Chaetognatha								
5. Nematoda								
6. Copepoda	I-6	78	I-6	1			324	568
7. Other Mollusca								
8. Appendicularia								
9. Planktonic larval forms	I-9	3					12	21
10. Others								
11. Isopoda								
<b>Total</b>		<b>88</b>		<b>120</b>			<b>1792</b>	<b>3143</b>

Remarks;      \*      calculated by assumption.  
                   \*\*      unidentified eggs which may be of copepods and/or benthic invertebrate.  
                   +      less than 1 indiv. /m<sup>3</sup>.

## ZOOPLANKTON RECORD SHEET

Series No. 25-050

1. Sample. No. 2503NG08      7. Net used NORPAC(330 $\mu$ m)  
 2. JARE 25      8. Method of haul Vertical  
 3. Area Syowa Station      9. Wire run out (m) 37  
 4. Station No. 3      10. Depth of haul (m) 37  
 5. Position 68° 59' 57" S      11. Volume of water filtered\*(m<sup>3</sup>) 5.22  
     39° 37' 16" E      12. Total number per m<sup>3</sup> 20  
 6. Date & Time(LMT) 1984/12/4, 13:45

Proportion of Sample sorted	(1/1 Sample) Sort I		(/ Sample) Sort II		(/ Sample) Sort III		Indiv. No. per haul	Indiv. No. per m <sup>3</sup>
	Vial No.	Indiv. No. in vial	Vial No.	Indiv. No. in vial	Vial No.	Indiv. No. in vial		
1. Ciliata								
Foraminifera								
Copepoda, nauplius								
Eggs**	I-1	33					33	6
2. Hydroida	I-2	1					1	+
3. Siphonophora	I-3	2					2	+
4. Chaetognatha								
5. Nematoda								
6. Copepoda	I-6	49					49	9
7. Other Mollusca								
8. Appendicularia								
9. Planktonic larval forms	I-9	14					14	3
10. Others								
11. Isopoda								
Total		99					99	20

Remarks;      \*      calculated by assumption.  
                   \*\*      unidentified eggs which may be of copepods and/or benthic invertebrate.  
                   +      less than 1 indiv. /m<sup>3</sup>.

## ZOOPLANKTON RECORD SHEET

Series No. 25-051

1. Sample. No. 2503NP08                      7. Net used NORPAC(25 $\mu$ m)  
 2. JARE 25                                              8. Method of haul Vertical  
 3. Area Syowa Station                      9. Wire run out (m) 35  
 4. Station No. 3                                      10. Depth of haul (m) 35  
 5. Position 68° 59' 57" S                      11. Volume of water filtered\*(m<sup>3</sup>) 0.57  
                   39° 37' 16" E                      12. Total number per m<sup>3</sup> 573  
 6. Date & Time(LMT) 1985/1/4, 22:00

Proportion of Sample sorted	(1/2 Sample)		(1/6 Sample)		(/ Sample)		Indiv. No. per haul	Indiv. No. per m <sup>3</sup>
	Sort I		Sort II		Sort III			
Category	Vial No.	Indiv. No. in vial	Vial No.	Indiv. No. in vial	Vial No.	Indiv. No. in vial		
1. Ciliata								
Foraminifera								
Copepoda, nauplius			II-1	9			54	95
Eggs**			II-1	4			24	42
2. Hydroida								
3. Siphonophora								
4. Chaetognatha								
5. Nematoda								
6. Copepoda	I-6	122					244	428
7. Other Mollusca								
8. Appendicularia	I-8	1					2	4
9. Planktonic larval forms	I-9	1					2	4
10. Others								
11. Isopoda								
Total		124		13			326	573

Remarks;     \*     calculated by assumption.  
                   \*\*    unidentified eggs which may be of copepods and/or benthic invertebrate.  
                   +     less than 1 indiv. /m<sup>3</sup>.



## ZOOPLANKTON RECORD SHEET

Series No. 25-052

1. Sample. No. 2503NG09      7. Net used NORPAC(330 $\mu$ m)  
 2. JARE 25      8. Method of haul Vertical  
 3. Area Syowa Station      9. Wire run out (m) 35  
 4. Station No. 3      10. Depth of haul (m) 35  
 5. Position 68° 59' 57" S      11. Volume of water filtered\*(m<sup>3</sup>) 6.67  
                   39° 37' 16" E      12. Total number per m<sup>3</sup> 12  
 6. Date & Time(LMT) 1985/1/4, 20:50

Proportion of Sample sorted	(1/1 Sample) Sort I		(/ Sample) Sort II		(/ Sample) Sort III		Indiv. No. per haul	Indiv. No. per m <sup>3</sup>
	Vial No.	Indiv. No. in vial	Vial No.	Indiv. No. in vial	Vial No.	Indiv. No. in vial		
1. Ciliata								
Foraminifera								
Copepoda, nauplius								
Eggs**	I-1	4					4	1
2. Hydroida								
3. Siphonophora								
4. Chaetognatha								
5. Nematoda								
6. Copepoda	I-6	64					64	10
7. Other Mollusca								
8. Appendicularia	I-8	7					7	1
9. Planktonic larval forms	I-9	4					4	1
10. Others								
11. Isopoda								
Total		79					79	12

Remarks;      \*      calculated by assumption.  
                   \*\*      unidentified eggs which may be of copepods and/or benthic invertebrate.  
                   +      less than 1 indiv. /m<sup>3</sup>.