

Table 1: 渦鞭毛藻シスト化石の産出状況(能取湖南西地域: Fig. 3a, 常呂層). *C.an.-L. hya.* 及び *C-L: Cleistosphaeridium ancyreum-Lejeunecysta hyalina* 帯, *Sp.-T.* および *Sp. spp.-T. ros: Spiniferites spp.-Tuberculodinium rossignoliae* 帯.

Table 1: Occurrence chart of selected dinoflagellate cysts taxa (Southwest area of the Notoro Lake: Fig. 3a, Tokoro Formation). *C.an.-L. hya* and *C-L: Cleistosphaeridium ancyreum-Lejeunecysta hyalina* Zone, *Sp.-T.* and *Sp. spp.-T. ros: Spiniferites spp.-Tuberculodinium rossignoliae* Zone.

Formations (Kawakami et al., 2018)	Tokoro Formation											
Formations (Sato and Mitsunashi, 1970)	Tokoro		Notoro Fm. (west side)				Tokoro		Notoro (west)			
Dinocyst zones	<i>Sp-T</i>	<i>C. an.-L. hya.</i>	<i>Sp-T</i>	<i>C-L?</i>			<i>Sp. spp.-T. ross.</i>		<i>C-L</i>			
Diatom zones (NPD)	Barren											
Sampling sections	Southwest area of the Notoro Lake							Heiwa-zawa				
Sample No.	16 20140526-16	32 20140526-32	12 120611-12	25 20140525-25	52 20140525-52	98 H24-98	99 H24-99	01 20161110-01	02 20161110-02	05 20161110-05	06 20161110-06	07 20161110-07
Dinoflagellate cysts												
<i>Achomosphaera</i> sp. A	13											
<i>Bellatudinium hokkaidoanum</i>	13		2	1	1							
<i>Cleistosphaeridium ancyreum</i>	3	1		1		1	1		1	1	2	
<i>Filisphaera filifera</i>	12		1	1		1		6				
<i>Hystrichostrogylon membraniphorum</i>	2						1	1	3		3	1
<i>Hystrichosphaeropsis obscura</i>	3											
<i>Lejeunecysta granosa</i>	1	3					1					1
<i>Lejeunecysta hyalina</i>	6			1	2	1	3	2		1		2
<i>Lejeunecysta</i> spp.	14	9	1	7		1	8	8	7	6	3	7
<i>Operculodinium</i> cf. <i>centrocarpum</i>	3											
<i>Selenopemphix</i> ? sp.	1											
<i>Senegalinium</i> ? spp.	5		5		2							
<i>Spinidinium</i> ? <i>tripylum</i>	37		4	2								
<i>Spinidinium</i> sp. A	47		3	3								
<i>Spinidinium</i> spp.	22		5	1	2							
<i>Spiniferites membranaceus</i>	6											
<i>Tectatodinium pellitum</i>	2	1		2	3			4	1	3	1	3
<i>Trinovantedinium boreale</i>	5			3	31	1						
<i>Williamsidinium diaphanes</i>	75											
<i>W. diaphanes</i> (questionable)	63		2									
<i>Achomosphaera spongiosa</i>		1				1		4		1	5	
<i>Achomosphaera</i> spp.	3	1		1		2		5	13	1		6
<i>Brigantedinium</i> spp.	1		3									
<i>Operculodinium</i> spp.	2				18	7	2	1	3	2		2
<i>Selenopemphix</i> spp.	1		2					2				1
<i>Spiniferites ramosus ramosus</i>	1			1	1	2		5	1	1	1	
<i>Spiniferites</i> spp.	3	3	1	6	6	9		17	6	1	2	2
<i>Tectatodinium</i> spp.	1		3	7	3			6	6	4	3	2
<i>Baticasphaeridium minuta</i>				1				1	1		1	
<i>Melitasphaeridium</i> sp. A			3									
<i>Hystrichokolpoma denticulatum</i>					1							
<i>Hystrichokolpoma</i> spp.					1				3		1	1
<i>Operculodinium centrocarpum</i>					4	3		4	1			1
<i>Spiniferites membranaceus</i>					1	1		1				1
<i>Achomosphaera</i> cf. <i>alcicornu</i>						1						
<i>Hystrichostrogylon</i> spp.						2			1	1		
<i>Operculodinium</i> sp. B of Kurita (2004)						1						
<i>Reticulatosphaera actinocoronata</i>						1		4	2			
<i>Spiniferites adnatus</i>						3	1	1	4		2	1
<i>Spiniferites ellipsoideus</i>						1	1	1	2			
<i>Tuberculodinium rossignoliae</i>						3			3	3	2	
<i>Tuberculodinium vancampoe</i>						1						
<i>Lejeunecysta</i> sp. A								1				
<i>Lejeunecysta</i> sp. B								5		2		
<i>Lingulodinium</i> spp.								3		1	1	
<i>Mellitasphaeridium</i> spp.								3	1			
<i>Operculodinium israelianum</i>								1				
<i>Reticulatosphaera</i> spp.								3				
<i>Spiniferites asperulus</i>								1				
<i>Spiniferites nortensis</i> ?								2				
<i>Spiniferites ovatus</i>								1				
<i>Spiniferites strictus</i>								1				
<i>Tanyosphaeridium</i> spp.								1				
<i>Achomosphaera ramulifera</i>									1	1		
<i>Cleistosphaeridium placacanthum</i>										1		
<i>Spiniferites pseudofurcatus</i>										3	1	
<i>Cleistosphaeridium</i> spp.											1	
<i>Rottnestia</i> spp.											1	
dinocyst gen. et sp. indet.					1		1	6	8	1	5	
Number of species (diversity)	17	5	5	10	8	15	7	19	11	10	9	8
Total counts	333	27	27	35	82	40	32	101	68	34	35	32