

Table 2: 渦鞭毛藻シスト化石の産出状況 (常呂丘陵セクションおよび採石場: Fig. 3b-c, 常呂層). *Sp.-T.*: *Spiniferites* spp.-*Tuberculodinium rossignoliae* 帯, *Cl. ancyreum-L. hyalina*: *Cleistosphaeridium ancyreum-Lejeunecysta hyalina* Zone.

Table 2: Occurrence chart of selected dinoflagellate cysts taxa (Tokoro Hills and Quarry: Fig. 3b-c, Tokoro Formation). *Sp.-T.*: *Spiniferites* spp.-*Tuberculodinium rossignoliae* Zone, *Cl. ancyreum-L. hyalina*: *Cleistosphaeridium ancyreum-Lejeunecysta hyalina* Zone.

| Formations (Kawakami et al., 2018)     | Tokoro Fm. (Notoro Silt Mbr.)             |           |                        |           |           |           |         |             |             |
|--|---|-----------|------------------------|-----------|-----------|-----------|---------|-------------|-------------|
| Formations (Sato and Mitsunashi, 1970) | Notoro Fm. (west side of the Notoro Lake) |           |                        |           |           |           |         |             |             |
| Dinocyst zones                         | Sp.-T. ?                                  |           | C. ancyreum-L. hyalina |           |           |           |         |             |             |
| Diatom zones (NPD)                     | Barren                                    |           |                        |           |           |           |         |             |             |
| Sampling section                       | Tokoro Hills                              |           |                        |           |           |           |         | Quarry      |             |
| Sample No.                             | 260623-01                                 | 260623-02 | 260623-03              | 260623-04 | 260623-05 | 260623-06 | H24-115 | 20151001-08 | 20151001-09 |
| Dinoflagellate cysts                   |   |           |                        |           |           |           |         |             |             |
| Operculodinium spp.                    | 5   | 16        | 2                      | 4         | 1         | 1         |         | 19          | 26          |
| Spiniferites adnatus                   | 1   | 1         | 1                      |           |           |           |         | 1           | 3           |
| Cleistosphaeridium ancyreum            | 3   |           | 8                      | 1         |           | 2         |         | 12          | 7           |
| Metitasphaeridium spp.                 | 2   | 1         | 1                      |           |           |           |         |             |             |
| Lejeunecysta spp.                      | 9   | 15        | 13                     | 14        | 11        | 9         |         | 14          | 8           |
| Spiniferites membranaceus              | 1   | 2         | 1                      | 4         |           |           |         | 1           |             |
| Achomosphaera spp.                     | 4   | 1         | 9                      | 3         |           |           |         | 1           |             |
| Lejeunecysta hyalina                   | 2   | 4         | 1                      | 3         | 4         | 3         |         | 3           | 1           |
| Areoligera spp.                        | 1   |           |                        |           |           |           |         |             |             |
| Spiniferites spp.                      | 11  | 4         | 12                     | 6         | 3         | 2         | 5       | 7           |             |
| Reticulatosphaera actinocoronata       | 2   | 4         |                        |           |           |           | 2       |             |             |
| dinocyst gen. et sp. indet.            | 11  |           |                        |           |           |           |         |             | 10          |
| Tectatodinium pellitum                 | 3   |           |                        |           | 2         |           |         | 1           |             |
| Achomosphaera ramulifera               | 1   |           | 2                      | 2         |           |           |         |             | 1           |
| Trinovantedinium spp.                  | 1   |           |                        |           |           |           |         |             |             |
| Hystrichostrogylon spp.                | 1   | 2         |                        | 3         |           | 1         |         | 1           |             |
| Selenopemphix spp.                     |   | 2         |                        |           |           |           |         | 1           | 1           |
| Spiniferites ramosus ramosus           |   | 1         | 4                      | 1         |           |           |         |             | 1           |
| Achomosphaera sp. A                    |   | 1         |                        |           |           | 1         |         |             |             |
| Lejeunecysta cf. convexa               |   | 1         |                        |           |           | 1         |         |             |             |
| Lejeunecysta granosa                   |   | 1         | 2                      |           |           |           |         | 2           |             |
| Achomosphaera spongiosa                |   | 1         | 2                      | 1         |           |           |         | 2           |             |
| Hystrichostrogylon membraniphorum      |   |           | 3                      |           |           |           |         | 5           |             |
| Impagidinium sp.                       |   |           | 1                      |           |           |           |         |             |             |
| Hystrichokolpoma spp.                  |   |           | 2                      |           | 1         |           |         |             |             |
| Spiniferites bulloideus                |   |           | 3                      |           |           |           |         |             |             |
| Hystrichokolpoma pacificum             |   |           |                        | 1         |           |           |         |             |             |
| Brigantedinium spp.                    |   |           |                        |           |           |           | 3       |             |             |
| Cleistosphaeridium spp.                |   |           |                        |           |           |           |         | 2           |             |
| Filisphaera filifera                   |   |           |                        |           |           |           |         | 1           |             |
| Diphyes sp. A                          |   |           |                        |           |           |           |         | 1           | 1           |
| Operculodinium centrocarpum            |   |           |                        |           |           |           |         | 2           | 6           |
| Spiniferites ramosus gracilis          |   |           |                        |           |           |           |         | 1           |             |
| dinocyst gen. et sp. indet.            |   |           |                        |           |           |           | 2       |             |             |
| Number of species (diversity)          | 7   | 9         | 11                     | 7         | 2         | 4         | 1       | 11          | 8           |
| Total counts                           | 58  | 57        | 67                     | 43        | 22        | 20        | 12      | 76          | 66          |