



## **Appendix 2**

Calcareous nannofossil range chart of the Toarcian – lower Bajocian interval at Colle di Sogno. As specified in Figure 1, this study regards the nannofossil assemblages in the interval overlying the uppermost Pliensbachian-lower Toarcian portion previously documented by Casellato & Erba (2015). Semi-quantitative abundances of individual taxa are reported, as well as the total abundance and preservation of calcareous nannofossils in each sample.

### **Total abundance:**

**CA (common to abundant):** more than 10 specimens per field of view.  
**C (common):** 6-10 specimens per field of view.  
**FC (few to common):** 1-5 specimens per field of view.  
**F (few):** 1 specimen in 1-5 fields of view.  
**RF (rare to few):** 1 specimen in 6-10 fields of view.  
**R (rare):** 1 specimen in 11-50 fields of view.  
**RR (very rare):** 1 specimen in 51-100 fields of view.  
**VB (virtually barren):** 1 specimen in more than 100 fields of view.

### **Abundance of individual taxa:**

**CA (common to abundant):** >30 specimens in 50 fields of view.  
**C (common):** >30 specimens in 100 fields of view.  
**FC (few to common):** >30 specimens in 200 fields of view.  
**F (few):** 11-30 specimens in 200 fields of view.  
**RF (rare to few):** 6-10 specimens in 200 fields of view.  
**R (rare):** 1-5 specimens in 200 fields of view.  
**RR (extremely rare):** 1 specimen in 400 fields of view.

Preservation of calcareous nannofossils was characterized adopting the codes described by Roth (1983): E1 (slight etching); E2 (moderate etching); E3 (strong etching); O1 (slight overgrowth); O2 (moderate overgrowth); O3 (strong overgrowth). Furthermore, preservation was also coded as follows:

**G (good):** no evidence of etching and/or overgrowth; primary morphological characteristics are preserved.  
**MG (moderate to good):** very little evidence of etching and/or overgrowth; primary morphological characteristics are usually preserved.  
**M (moderate):** little evidence of etching and/or overgrowth; primary morphological characteristics are often altered.  
**PM (poor to moderate):** evidence of etching and/or overgrowth; primary morphological characteristics are often altered.  
**P (poor):** most specimens exhibit dissolution or overgrowth; primary morphological characteristics are often destroyed.