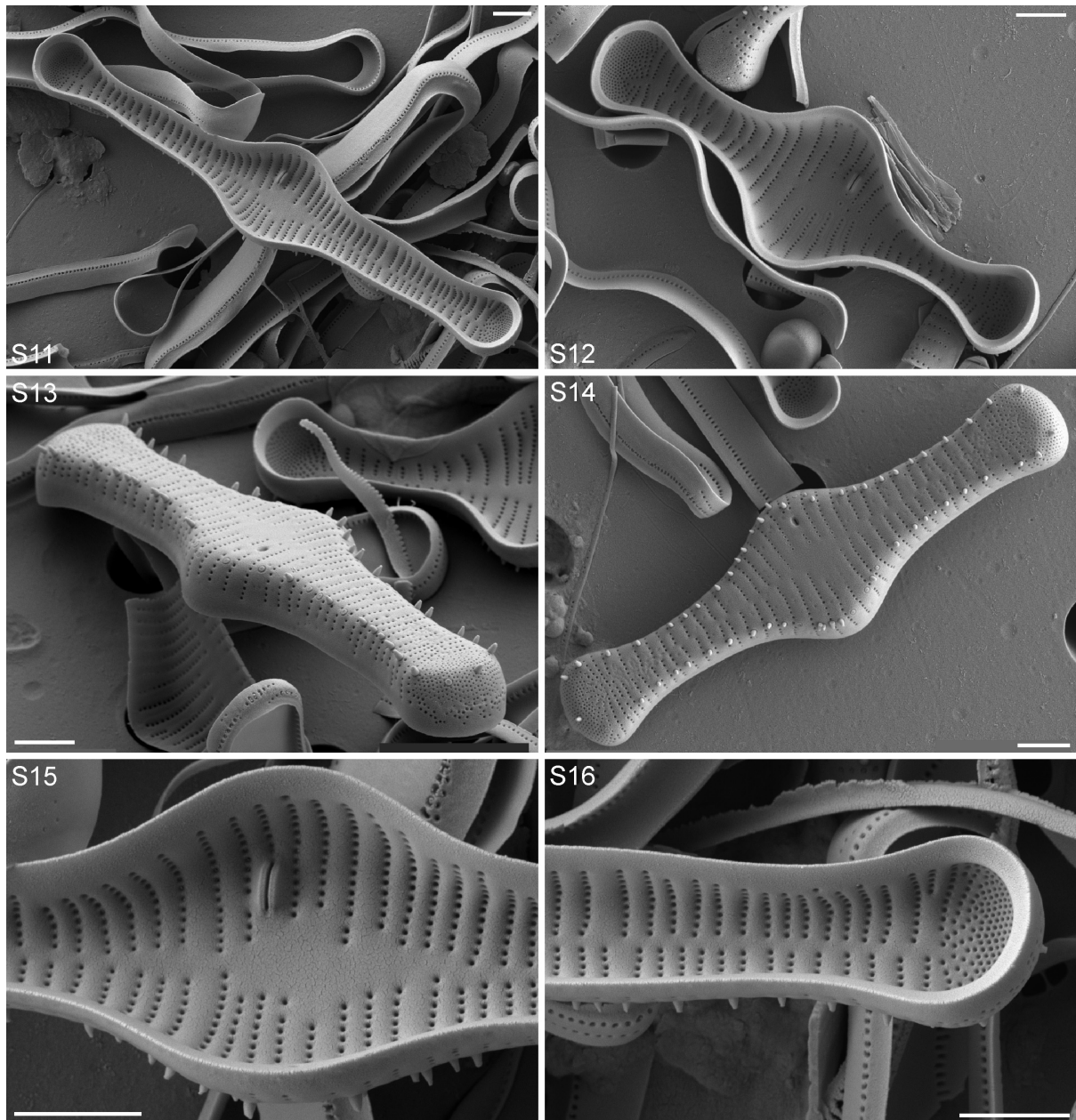
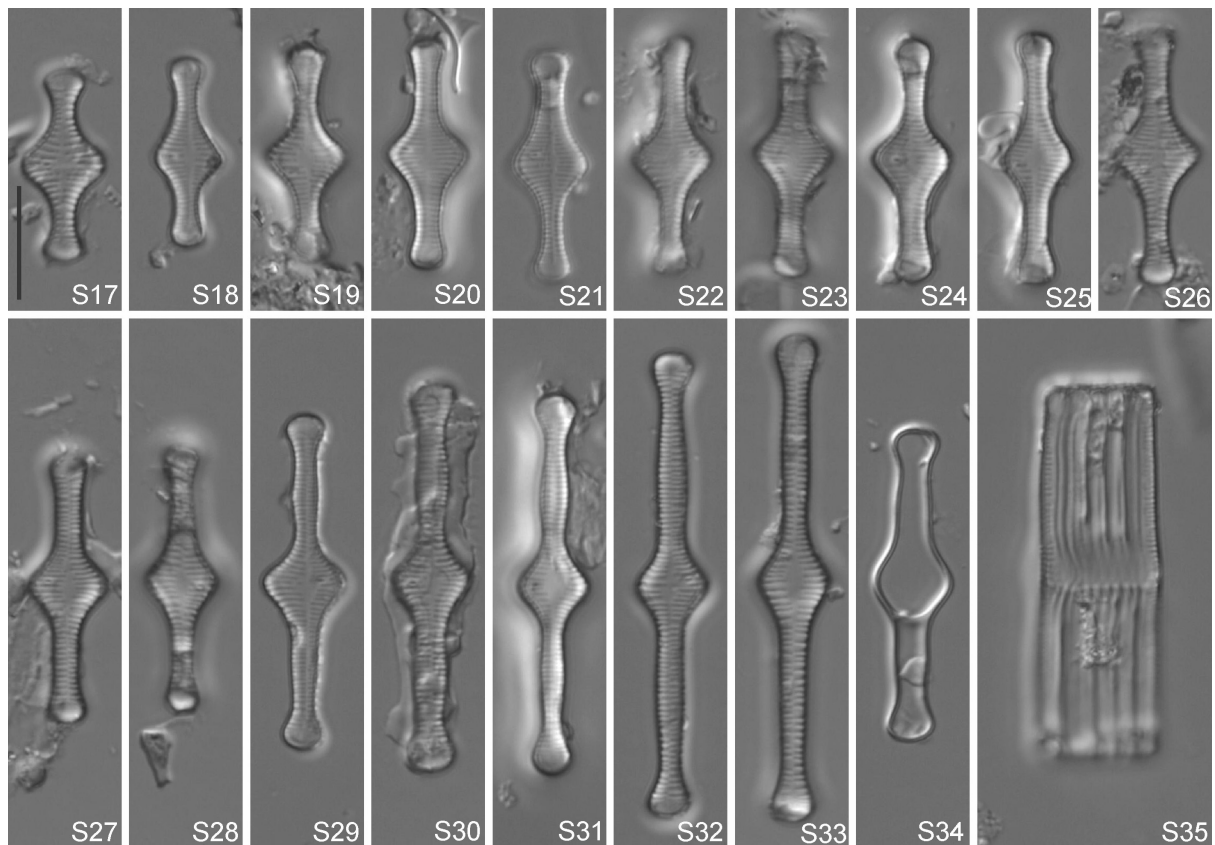


Figs S1–S10. *Tabellaria fenestrata* (Lyngbye) Kützing, sample from unnamed pond near Heckental, Grand Est Region, France: (S1–S10) SEM views; (S1) entire valve external view; (S2) entire valve internal view; (S3) close-up of apex in external girdle view; (S4) close-up of central area in external girdle view; (S5, S6) close-up of apex in external views; (S7) close-up of proximal inflation in external view; (S8) close-up of apex in internal view; (S9) close-up of proximal inflation in internal view; (S10) close-up of valve mantle in girdle view. Scale bars 2 μm.

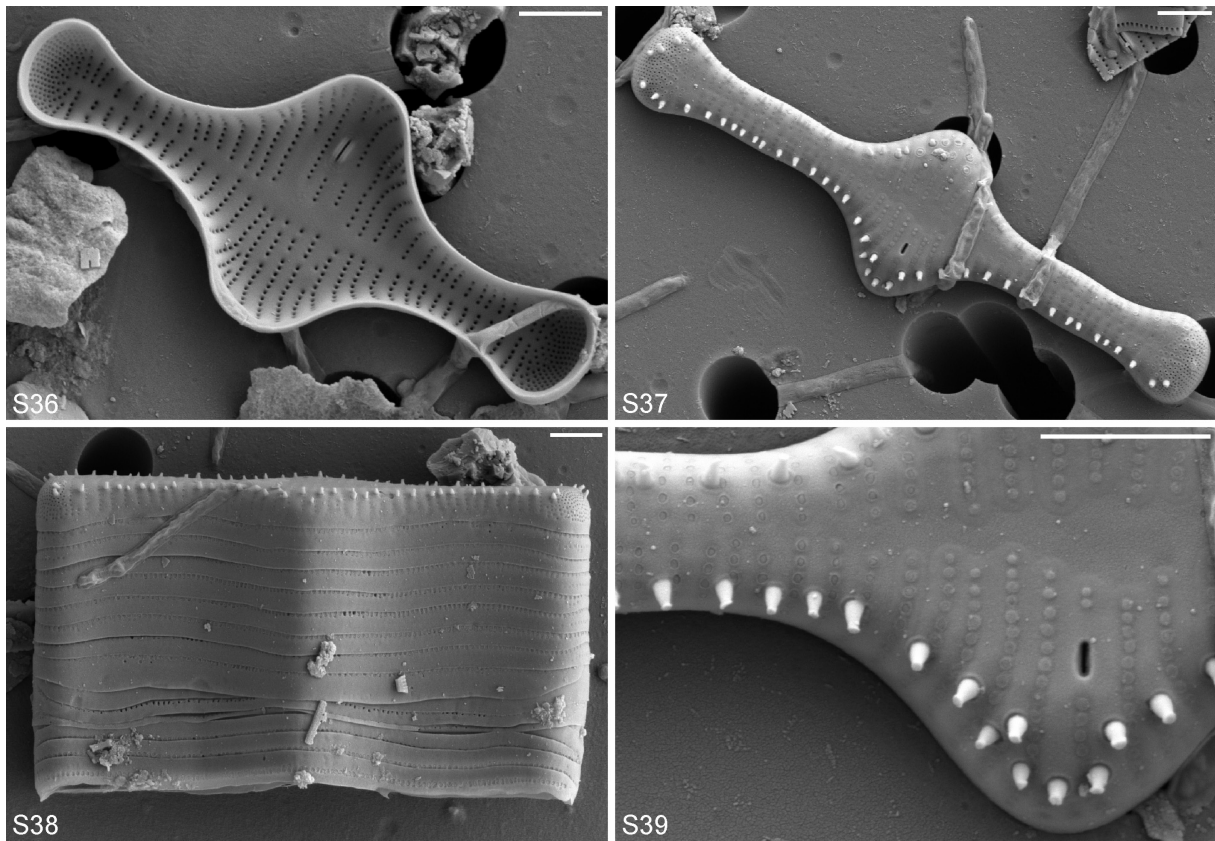


Figs S11–S16. *Tabellaria flocculosa* (Roth) Kützinger, type material (Diat. Spec. typ. No. 50 “In Aqua Dulci Naes Norvegia”. Eulenstein collection, Meise Botanic Garden, Belgium): (S11–S16) SEM views; (S11, S12) entire valve in internal views; (S13, S14) entire valve in external views; (S15) close-up of proximal inflation in internal view; (S16) close-up of apex in internal view. Scale bars 2 μm.

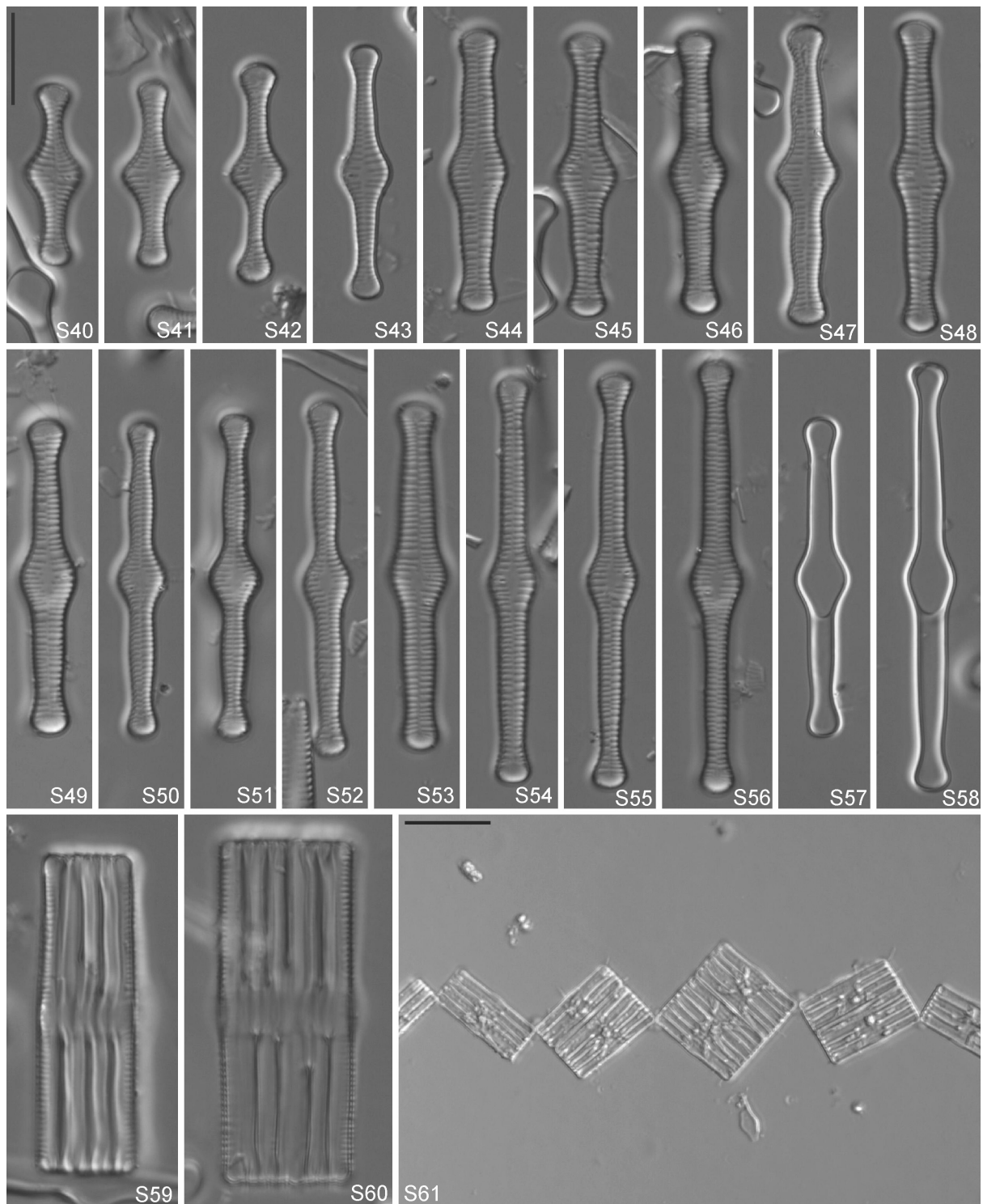




Figs S17–S35. *Tabellaria flocculosa* (Roth) Kützing, sample from Servièrès Lake, Auvergne Region, France: (S17–S33) LM valve views; (S34) LM copula view; (S35) LM girdle view. Scale bar 10  $\mu$ m.



Figs S36–S39. *Tabellaria flocculosa* (Roth) Kützing, sample from Servièrès Lake, Auvergne Region, France: (S36–S39) SEM views; (S36) entire valve in internal view; (S37) entire valve in external views; (S38) entire frustule girdle view; (S39) close-up of proximal inflation in external view. Scale bar 10  $\mu$ m.



Figs S40–S61. *Tabellaria flocculosa* (Roth) Kützing, sample from Blackbirds Lake, Grand–Est Region, France: (S40–S56) LM valve views; (S57, S58) LM copula views; (S59, S60) LM girdle view; (S61) LM colony in untreated sample. Scale bar 10  $\mu$ m.