

Luticola

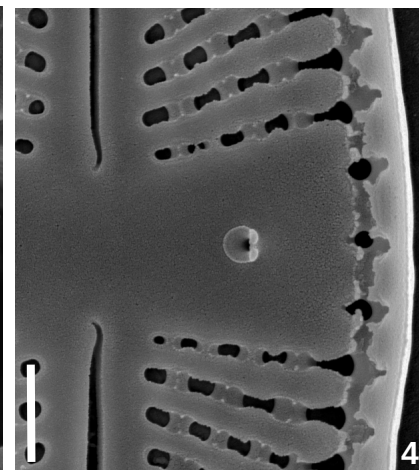
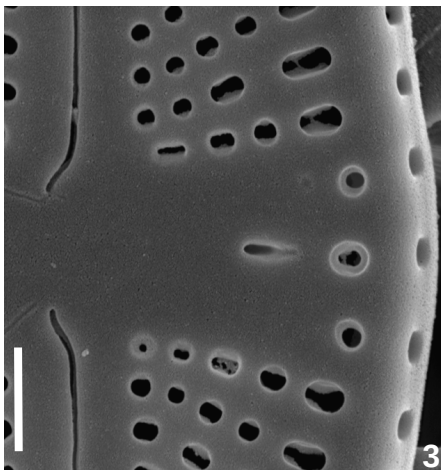
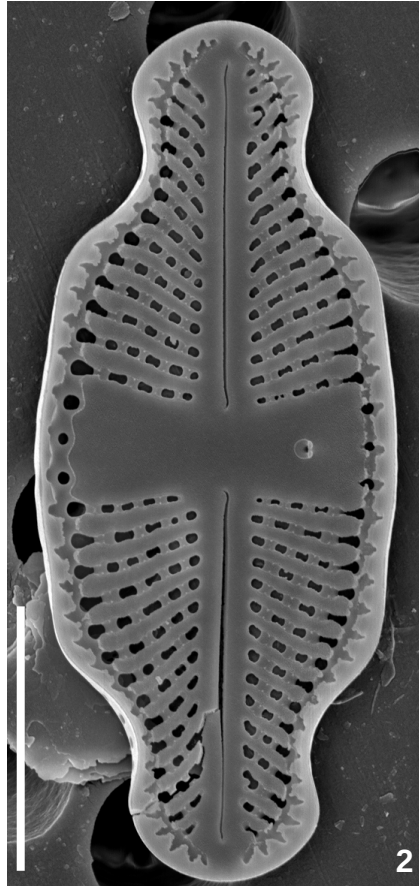
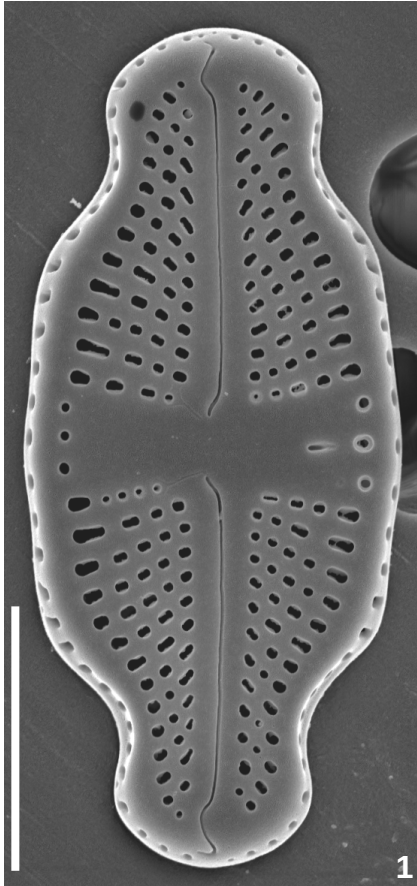


Plate 201

LM: x1500

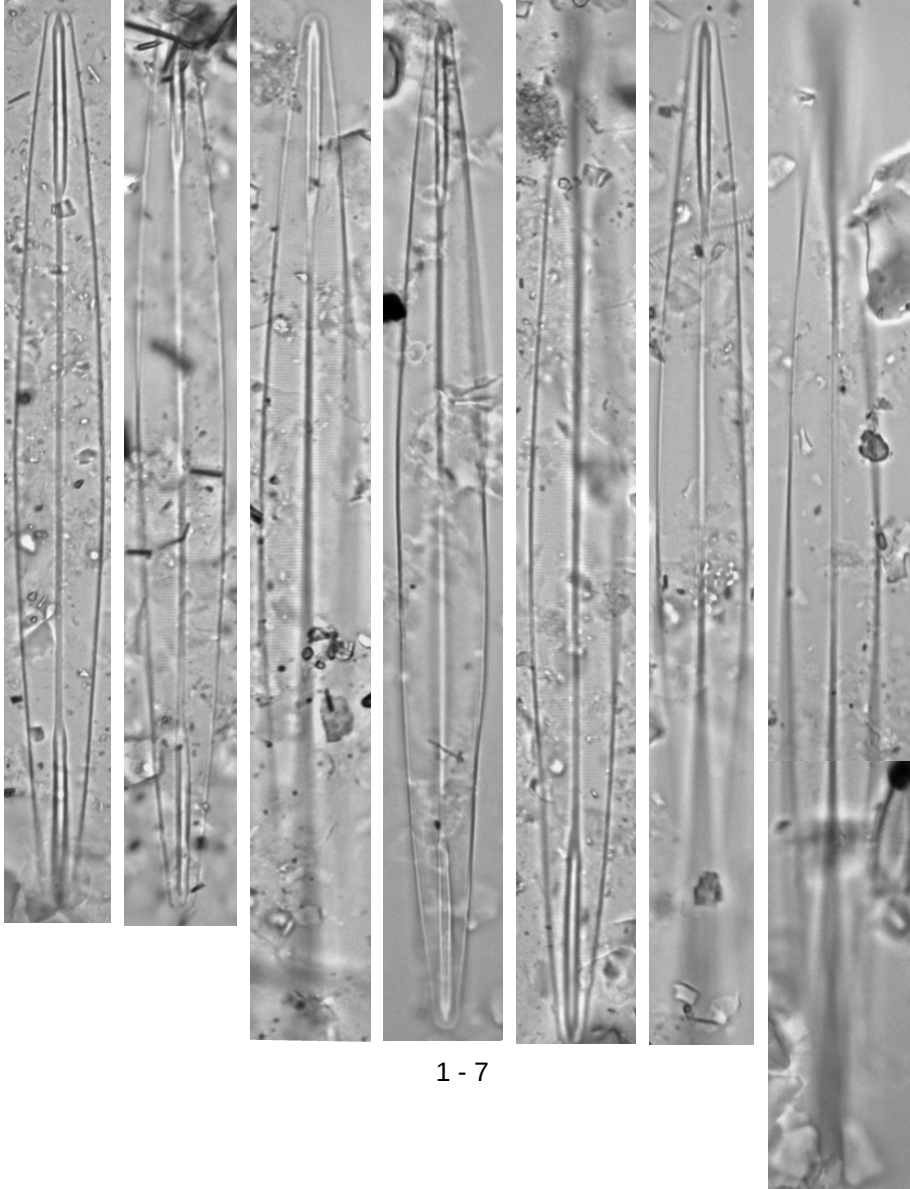
Figs 1-7: *Amphipleura pellucida* (Kützing) Kützing, p. 35 [APEL]

Scale bar = 10 μm

Figs 1-7: Luzianes, Monte Novo Stream (Mira basin), 09-05-2006.

Figs 1-7: Valve view.

Amphipleura



1 - 7

Plate 202

LM: x1500

Figs 1-70: *Brachysira neglectissima* Lange-Bertalot, p. 36 [BNEG]

Figs 71-83: *Brachysira brebissonii* R. Ross, p. 36 [BBRE]

Scale bar = 10 μm

Figs 1-17: Besteiros, Seixe Stream (Ribeiras do Algarve basin), 16-04-2006.

Figs 18-35: Oleiros, Seca Stream (Ribeiras do Algarve basin), 16-04-2006.

Figs 36-53: Brunhais, Ave River (Ave basin), 25-09-2007.

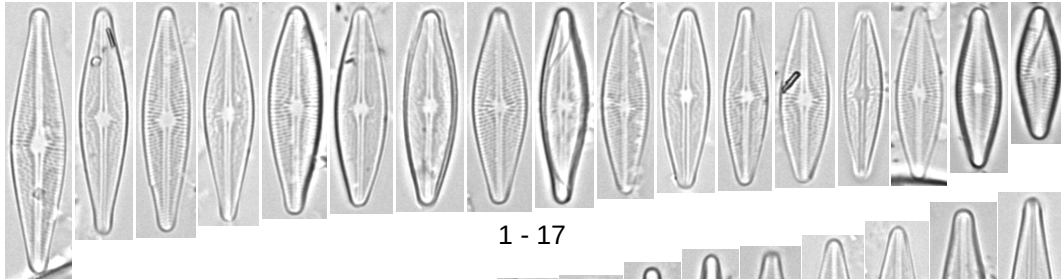
Figs 54-70: Vilarinho das Furnas Reservoir (Cávado basin), 15-08-2006.

Figs 71-83: Covas, Coura River (Minho basin), 21-09-2007.

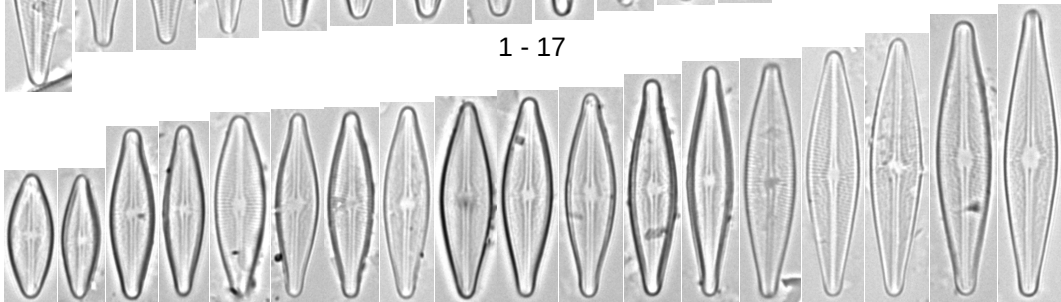
Figs 1-68, 71-82: Valve view.

Figs 69, 70, 83: Girdle view.

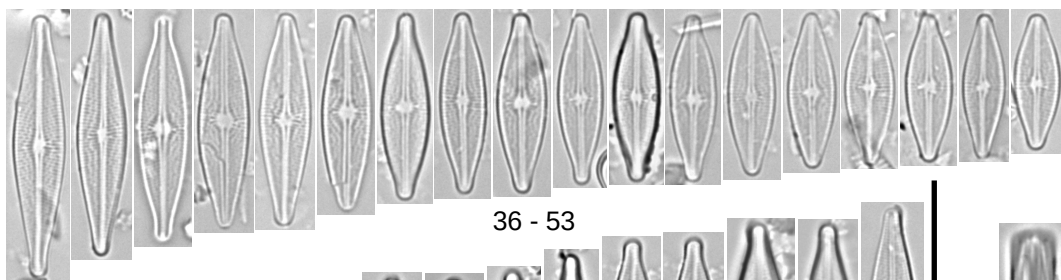
Brachysira



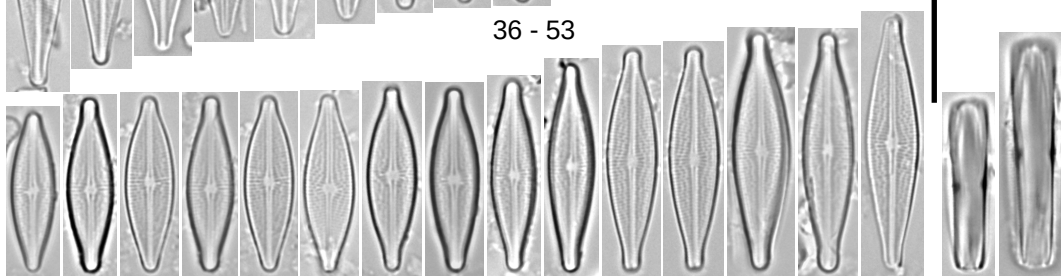
1 - 17



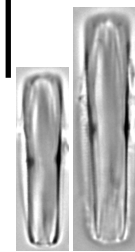
18 - 35



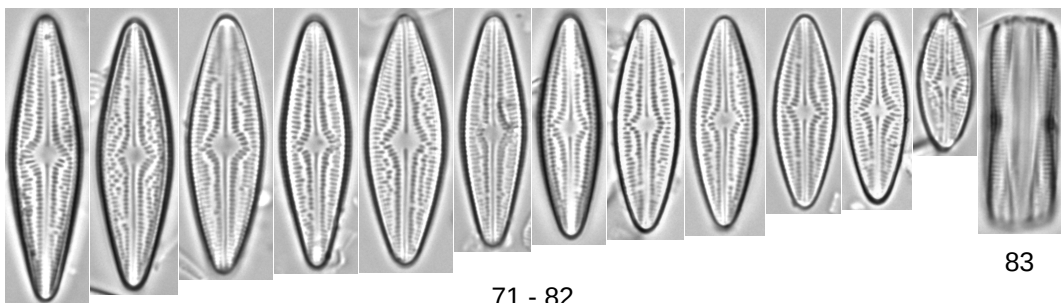
36 - 53



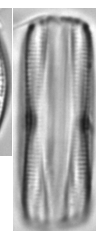
54 - 68



69 70



71 - 82



83

Plate 203

Figs 1-5: *Brachysira neglectissima* Lange-Bertalot, p. 36 [BNEG]

Scale bars = 1 μm

Figs 1-5: Oleiros, Seca Stream (Ribeiras do Algarve basin), 16-04-2006.

Fig. 1: External valve view.

Fig. 2: Internal valve view.

Figs 3, 5: Detail of the apical area.

Fig. 4: Detail of the central area.

Brachysira

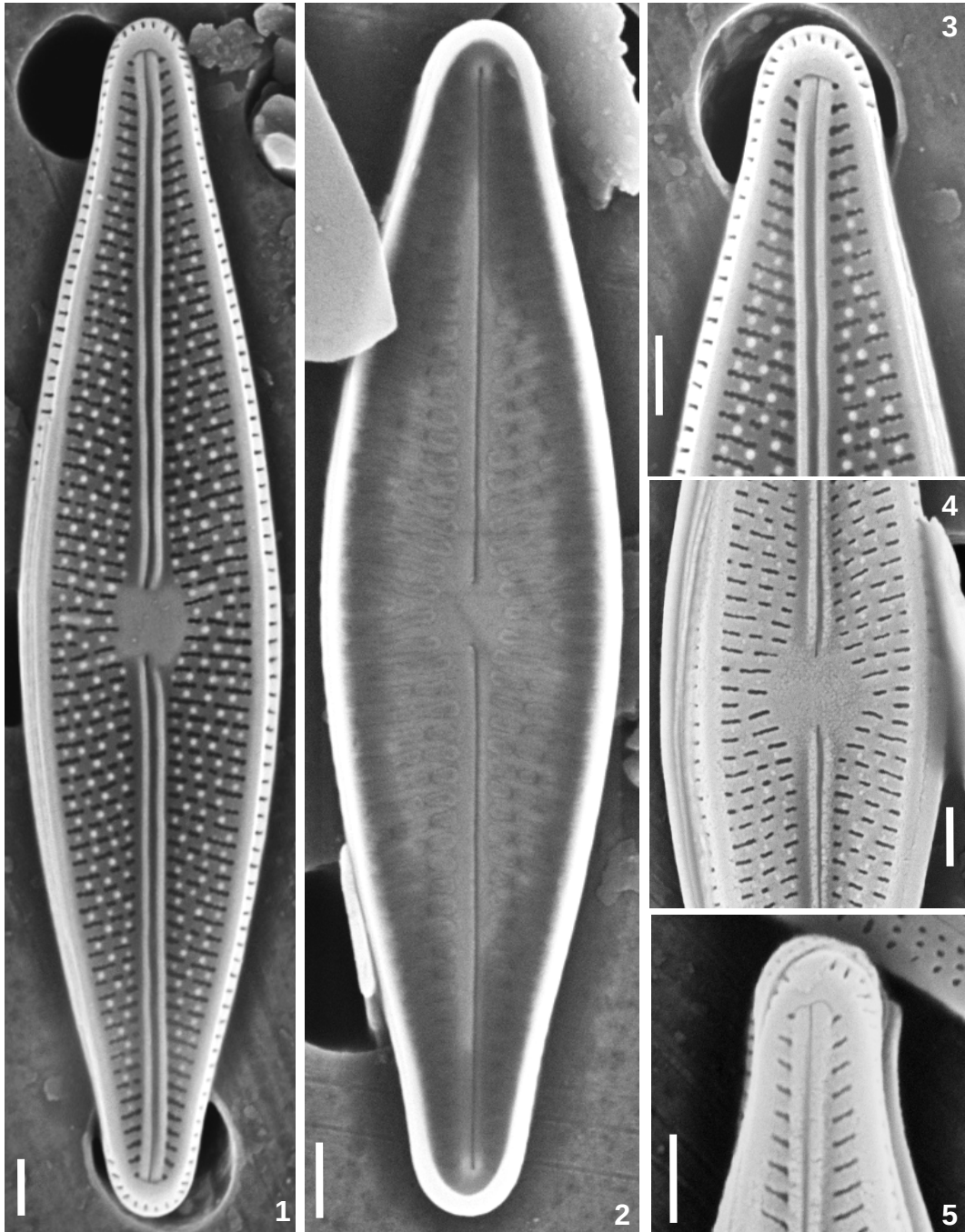


Plate 204

Figs 1-6: *Brachysira brebissonii* R. Ross, p. 36 [BBRE]

Scale bars = 1 μm

Figs 1-6: Covas, Coura River (Minho basin), 21-09-2007.

Fig. 1: External valve view.

Fig. 2: Internal valve view.

Fig. 3: External girdle view.

Figs 4, 5: Detail of the apical area.

Fig. 6: Detail of the central area.

Brachysira

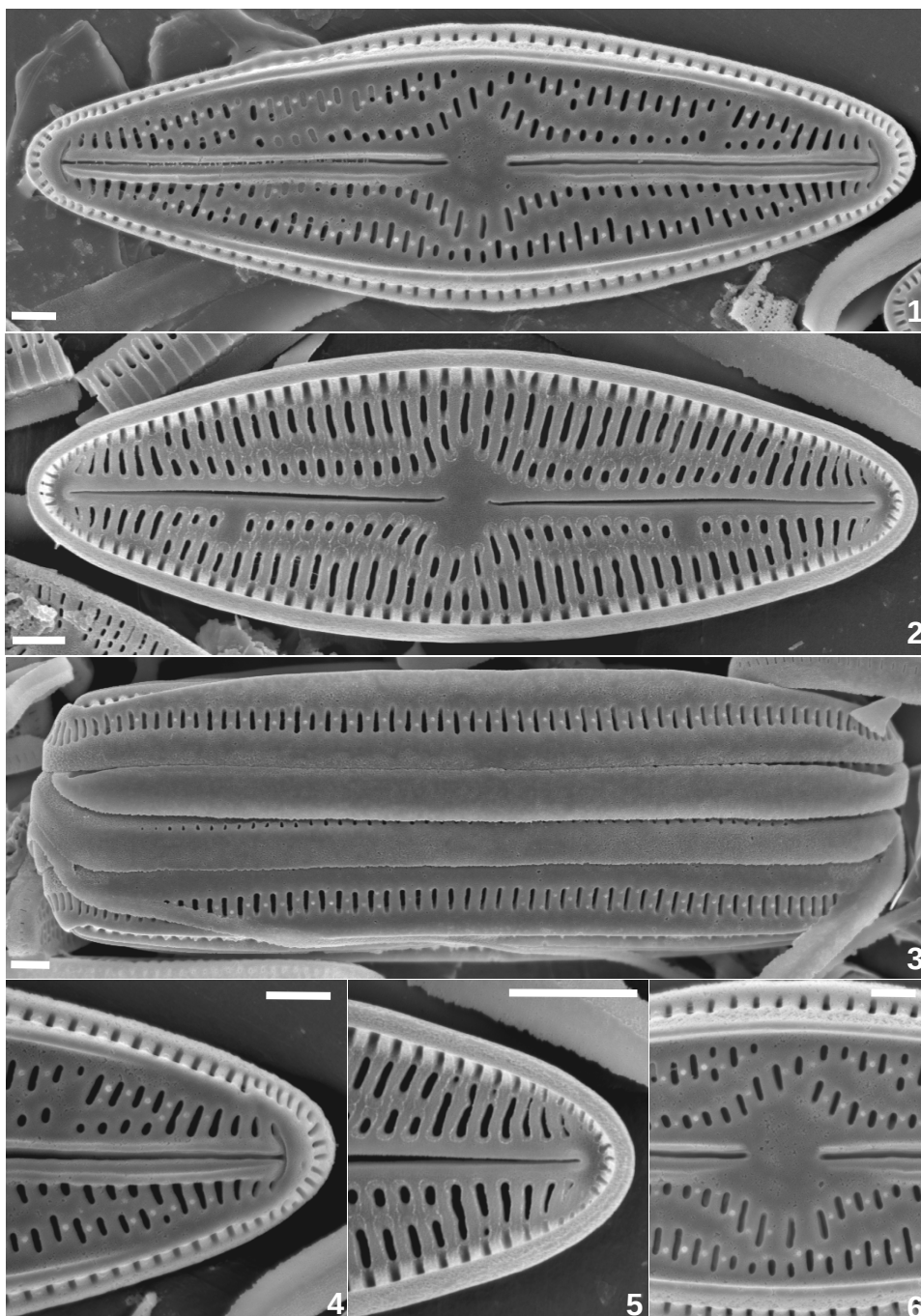


Plate 205

LM: x1500

Figs 1-12: *Stauroneis smithii* Grunow, p. 45 [SSMI]

Fig. 13: *Neidium bisulcatum* (Lagerstedt) Cleve, p. 36 [NBIS]

Figs 14-26: *Neidium* sp., p. 36 [NESP]

Figs 27-35: *Neidium longiceps* (W. Gregory) Cleve-Euler, p. 36 [NLGI]

Fig. 36: *Neidium* cf. *ampliatum* (Ehrenberg) Krammer, p. 36

Scale bar = 10 μm

Figs 1-12: Prata Stream (Sado basin), 02-06-2006.

Figs 13, 36: Sabugueiro, Fervença Stream (Mondego basin), 07-07-2007.

Figs 14-35: Brunhais, Ave River (Ave basin), 25-09-2007.

Figs 1-36: Valve view.

Stauroneis
Neidium

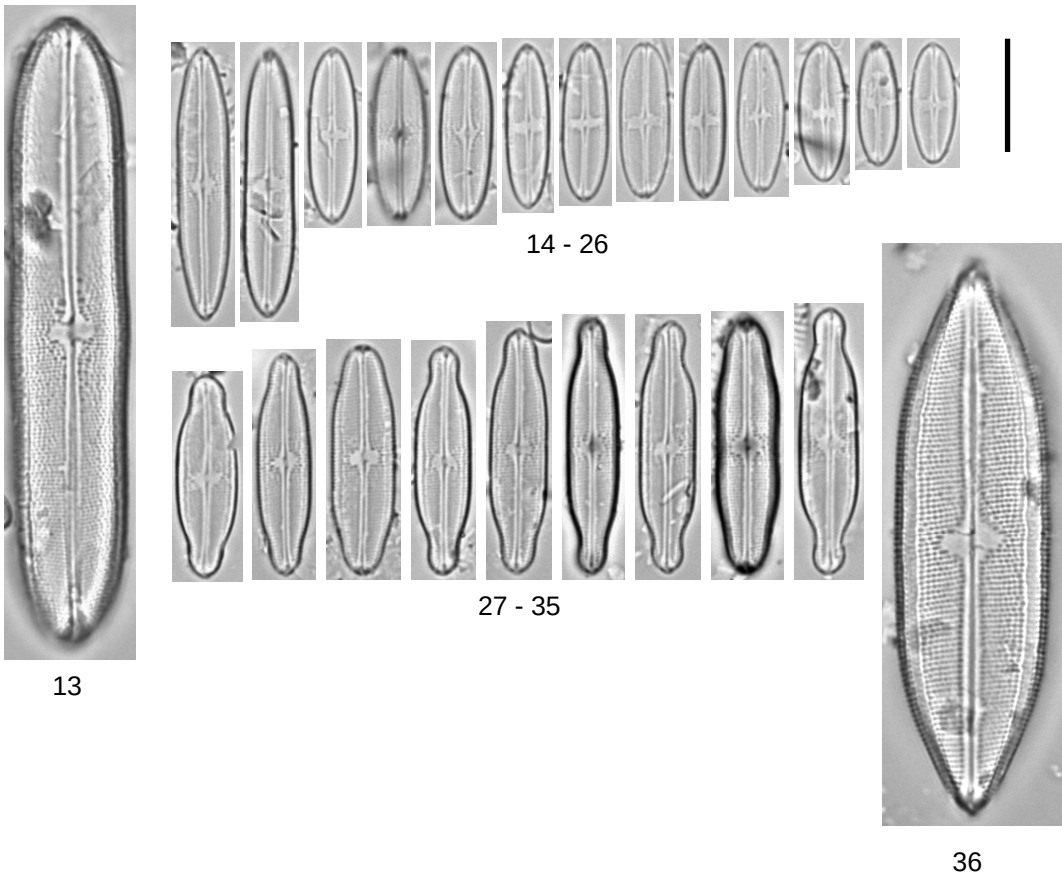
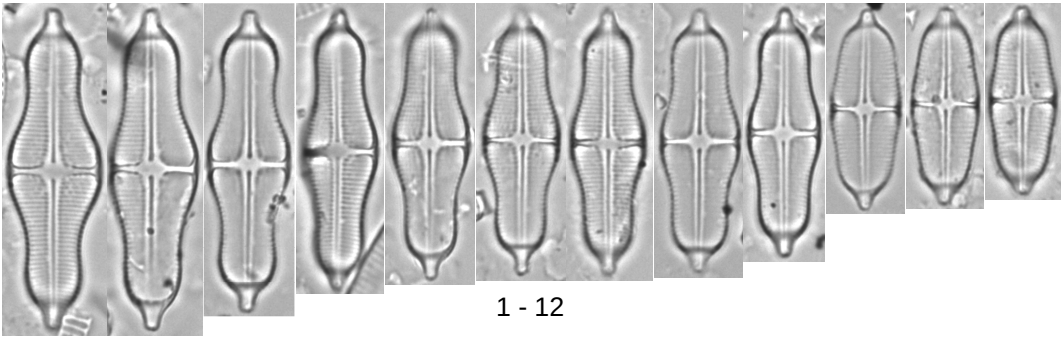


Plate 206

Figs 1, 2, 4: *Neidium* sp., p. 36 [NESP]

Fig. 3: *Neidium longiceps* (W. Gregory) Cleve-Euler, p. 36 [NLGI]

Scale bars = 1 μm

Figs 1-5: Brunhais, Ave River (Ave basin), 25-09-2007.

Figs 1-3: External valve view.

Fig. 4: Detail of apical area in external view.

Fig. 5: Detail of central area in external view.

Neidium

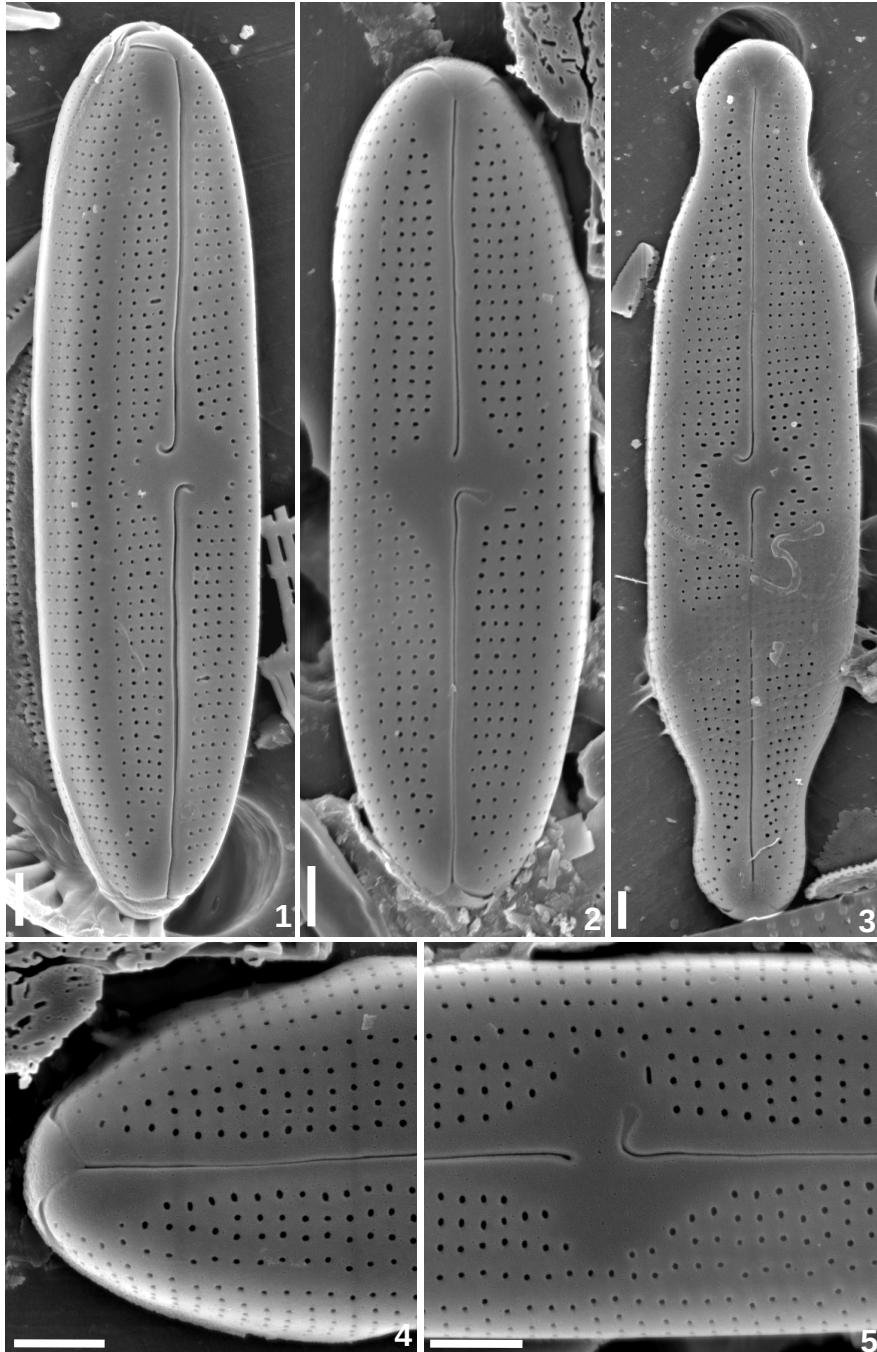


Plate 207

LM: x1500

Figs 1-45: *Eolimna minima* (Grunow in Van Heurck) Lange-Bertalot, p. 37 [EOMI]

Figs 46-60: *Eolimna subminuscula* (Manguin) Gerd Moser, Lange-Bertalot & Metzeltin, p. 37 [ESBM]

Figs 61-93: *Eolimna comperei* Ector, Coste & Iserentant, p. 37 [EOCO]

Figs 94-119: *Eolimna* sp.2, p. 37

Figs 120-132: *Chamaepinnularia* cf. *rexii* Veselá & Johansen, p. 37

Scale bar = 10 µm

Figs 1-22: Belmonte, Zêzere River (Tejo basin), 07-07-2006.

Figs 23-45: Gomes Aires, Mira River (Mira basin), 25-04-2006.

Figs 46-60: Peramanca Stream (Sado basin), 05-04-2006.

Figs 61-93: Veral, Tâmega River (Douro basin), 31-07-2007.

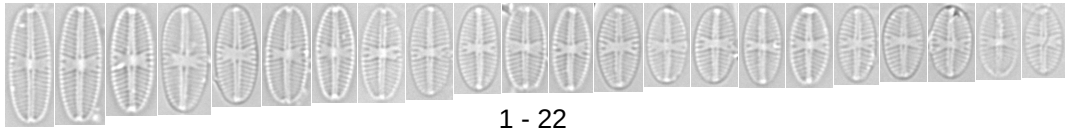
Figs 94-119: Carvalhosa Stream (Douro basin), 16-09-2007.

Figs 120-132: Barral, Homem River (Cávado basin), 26-09-2007.

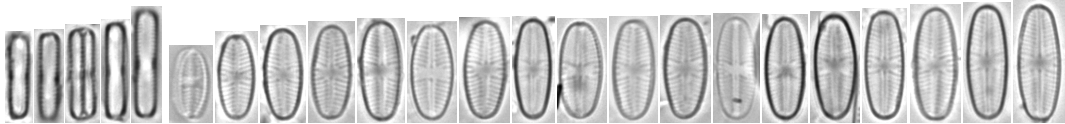
Figs 1-22, 28-59, 61-91, 94-130: Valve view.

Figs 23-27, 60, 92, 93, 131, 132: Girdle view.

Eolimna
Chamaepinnularia

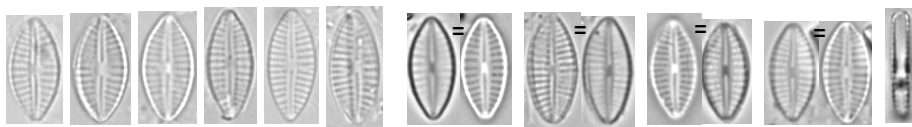


1 - 22



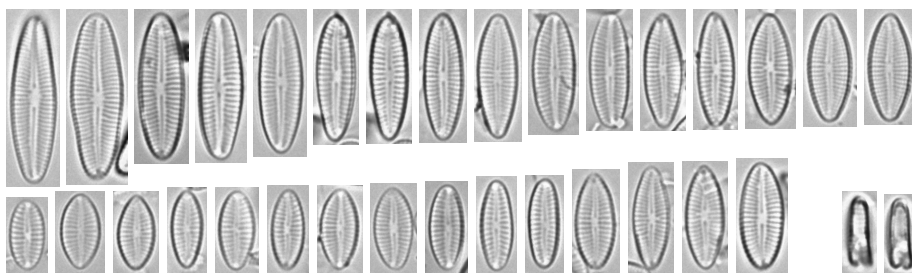
23 - 27

28 - 45



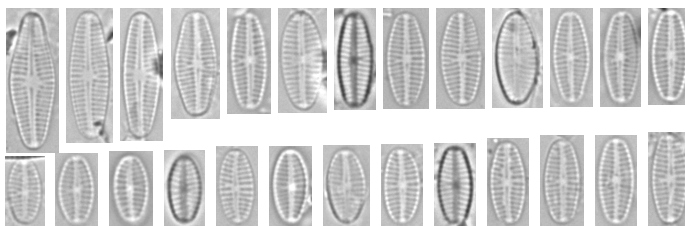
46 - 59

60

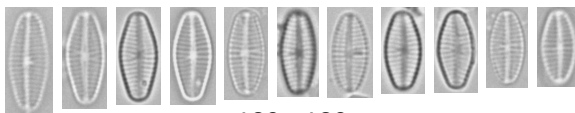


61 - 91

92 93



94 - 119



120 - 130



131¹³²

Plate 208

Figs 1-4: *Eolimna comperei* Ector, Coste & Iserentant, p. 37 [EOCO]

Scale bars = 1 μm

Figs 1-4: Veral, Tâmega River (Douro basin), 31-07-2007.

Fig. 1: External valve view.

Fig. 2: Internal valve view.

Fig. 3: Detail of the central area in external view.

Fig. 4: Detail of the central area in internal view.

Eolimna

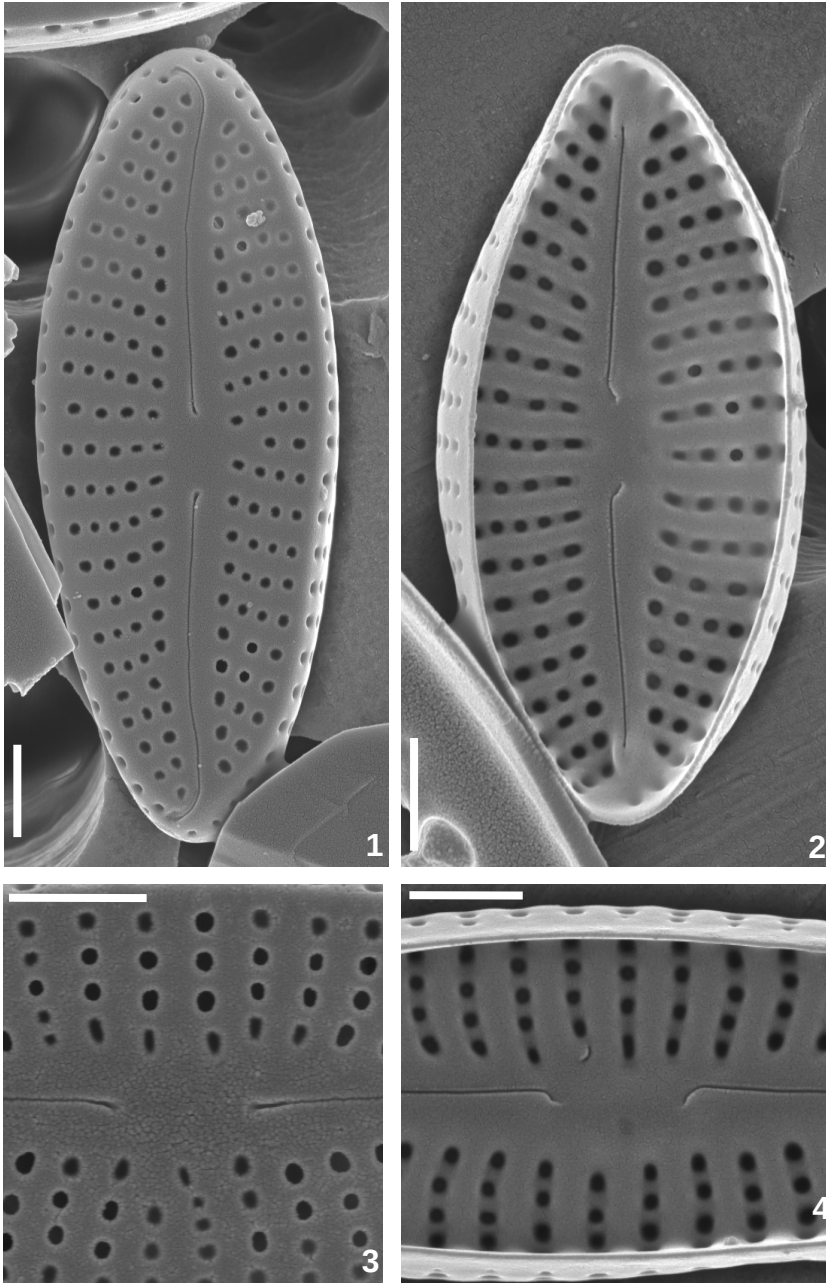


Plate 209

Figs 1-4: *Eolimna* sp.2, p. 37

Scale bars = 1 μm

Figs 1-4: Carvalhosa Stream (Douro basin), 16-09-2007.

Fig. 1: External valve view.

Fig. 2: Internal valve view.

Fig. 3: Detail of the apical area in external view.

Fig. 4: Detail of the central area in internal view.

Eolimna

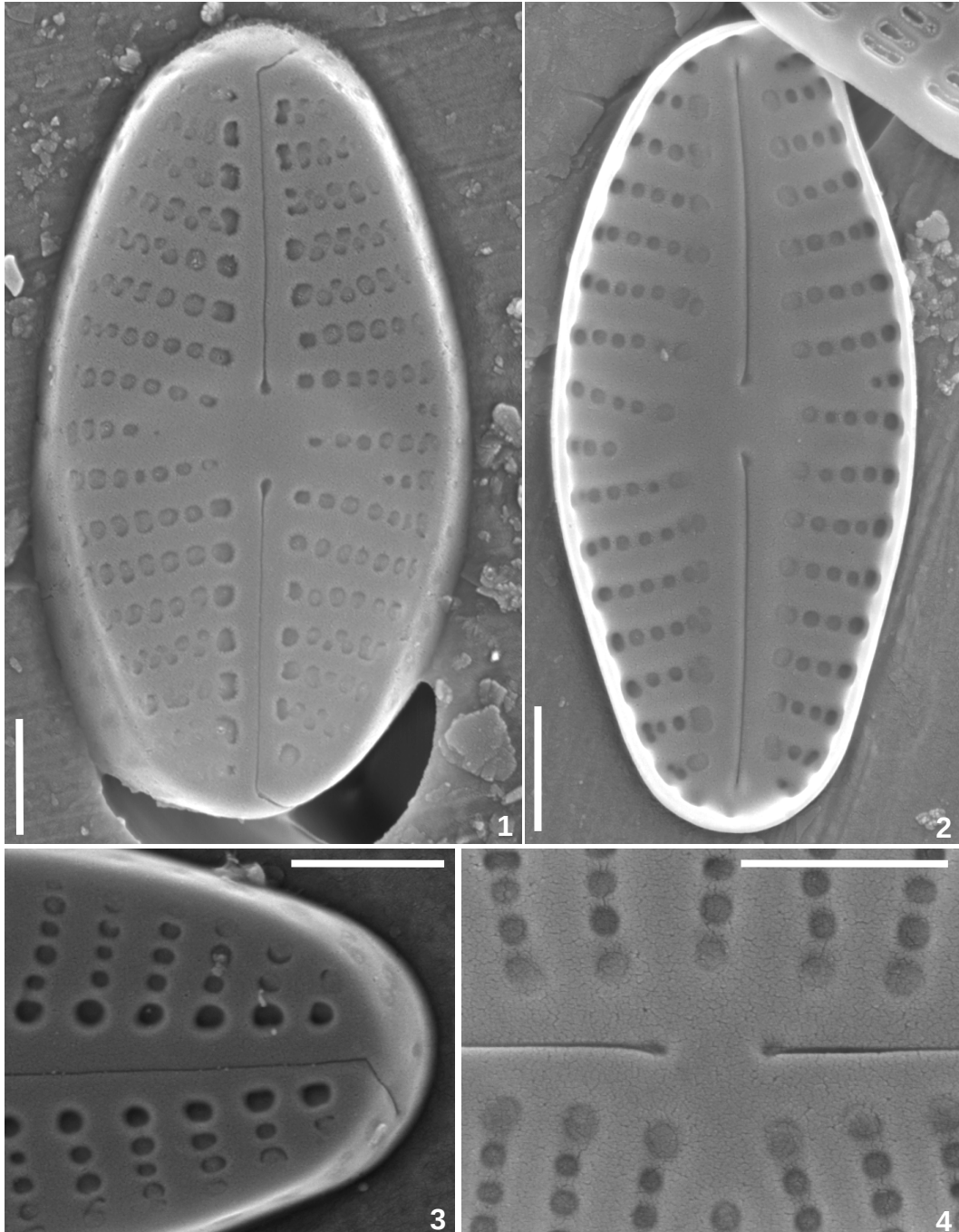


Plate 210

LM: x1500

Figs 1-22: *Mayamaea permitis* (Hustedt) Bruder & Medlin, p. 38 [MPMI]

Figs 23-40: *Fistulifera saprophila* (Lange-Bertalot & Bonik) Lange-Bertalot, p. 38 [FSAP]

Figs 41-62: *Adlafia* sp.1, p. 37

Figs 63-122: *Adlafia* sp.2, p. 37

Figs 123-126: *Eolimna* sp.3, p. 38

Figs 127-147: *Navicula schmassmannii* Hustedt, p. 44

Scale bar = 10 µm

Figs 1-40: Alferce, Monchique Stream (Ribeiras do Algarve basin), 17-04-2006.

Figs 41-62: Sanceriz, Aguieiras Stream (Douro basin), 11-07-2007.

Figs 63-90: Barral, Homem River (Cávado basin), 26-09-2007.

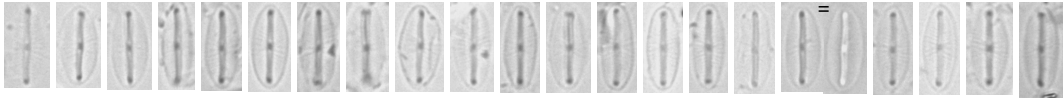
Figs 91-109: Açude da Moreira, Caima River (Vouga basin), 09-07-2007.

Figs 110-147: Barcelos, Cávado River (Cávado basin), 22-09-2007.

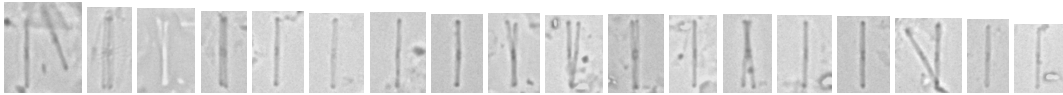
Figs 1-144: Valve view.

Figs 145-147: Girdle view.

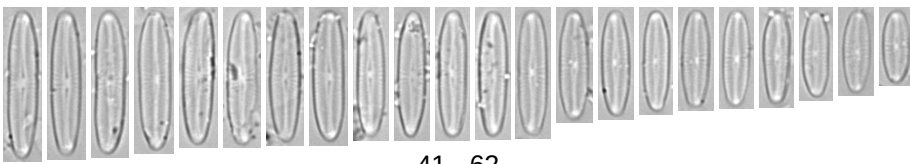
Mayamaea
Fistulifera
Adlafia
Eolimna
Navicula



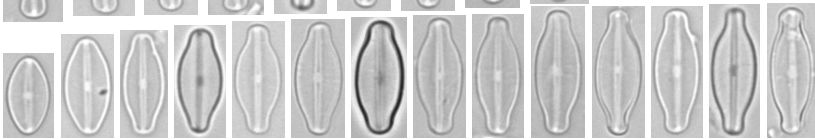
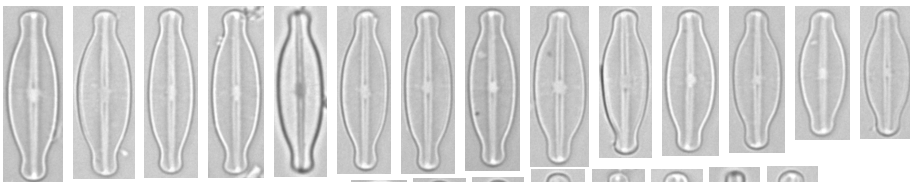
1 - 22



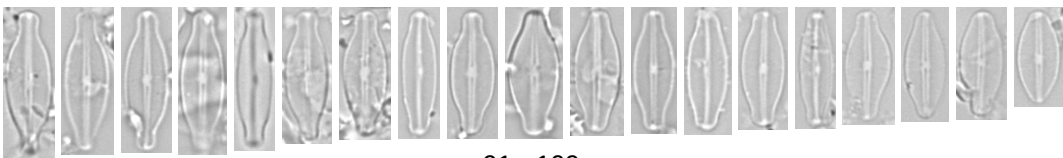
23 - 40



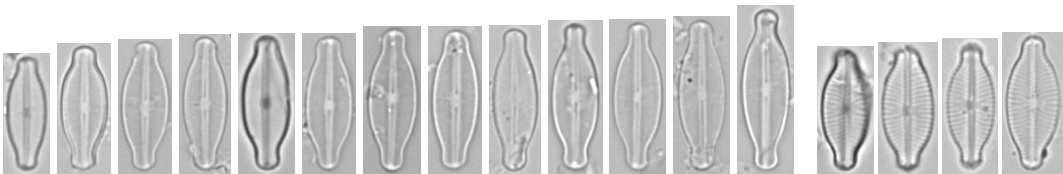
41 - 62



63 - 90

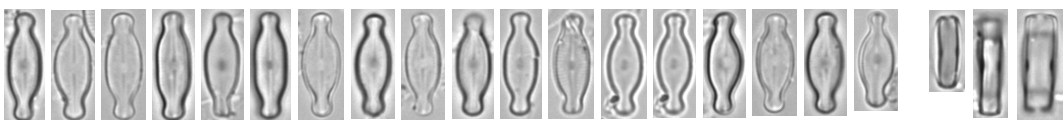


91 - 109



110 - 122

123 - 126



127 - 147

Plate 211

Figs 1-6: *Adlafia* sp.1, p. 37

Scale bars = 1 μm

Figs 1-6: Sanceriz, Agueiras Stream (Douro basin), 11-07-2007.

Figs 1-3: External valve view.

Fig. 4: Internal valve view.

Fig. 5: Detail of the apical area in external view.

Fig. 6: Detail of the central area in external view.

Adlafia

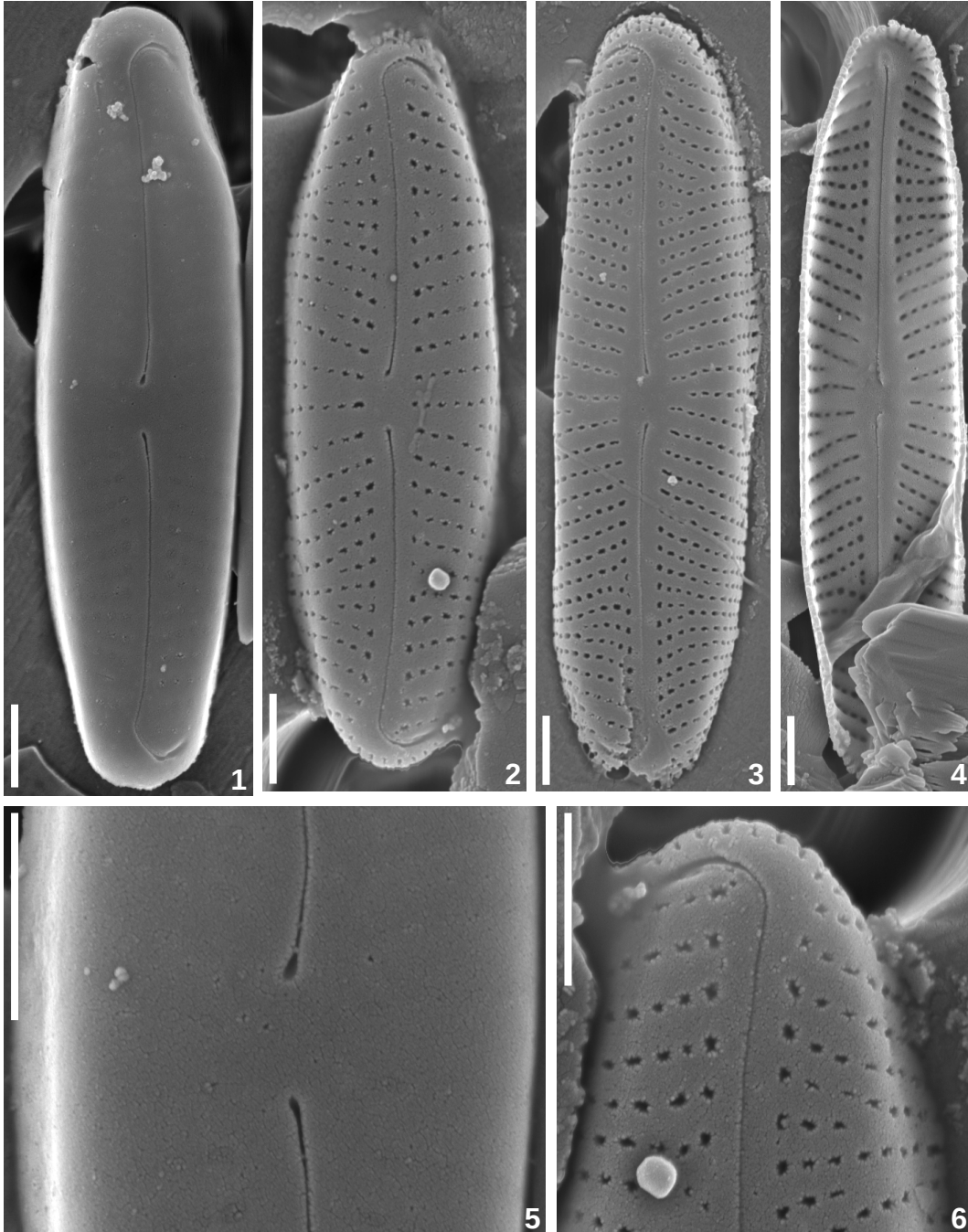


Plate 212

Figs 1-4: *Adlafia* sp.2, p. 37

Scale bars = 1 μm

Figs 1-4: Barcelos, Cávado River (Cávado basin), 22-09-2007.

Fig. 1: External valve view.

Fig. 2: Internal valve view.

Fig. 3: Detail of the apical area in external view.

Fig. 4: Detail of the apical area in internal view.

Adlafia

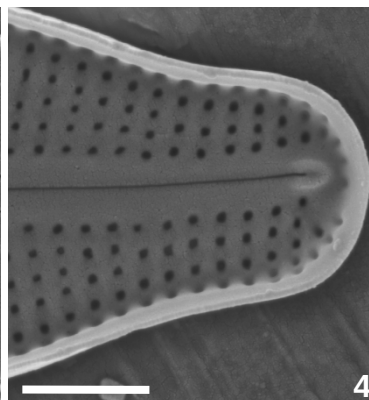
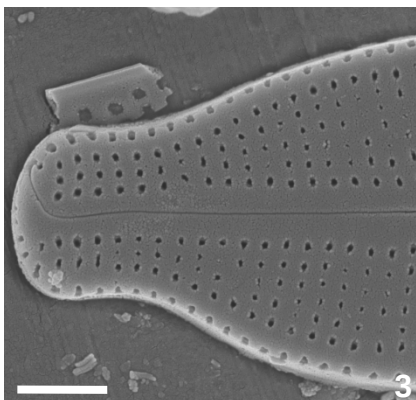
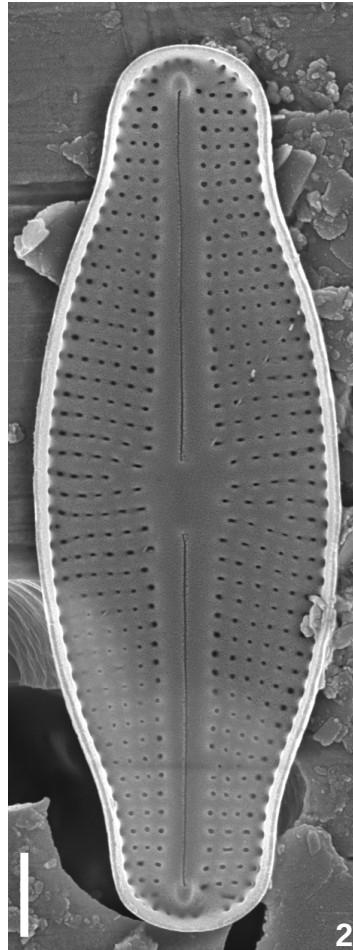
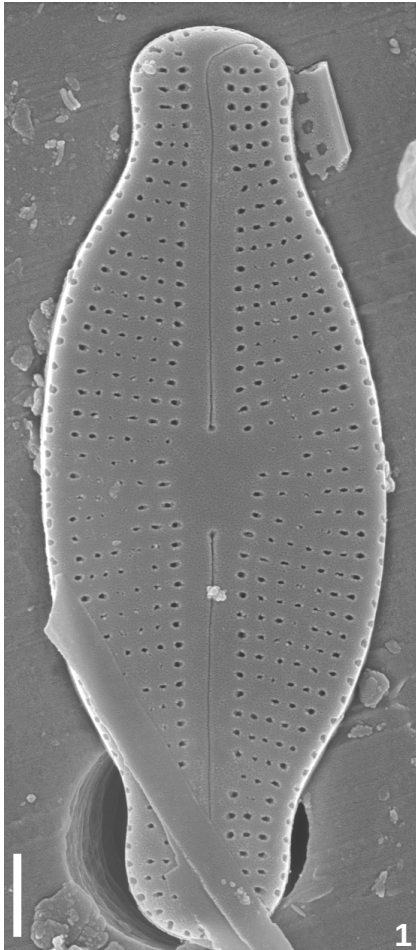


Plate 213

Figs 1-4: *Eolimna* sp.3, p. 38

Scale bars = 1 μm

Figs 1-4: Barcelos, Cávado River (Cávado basin), 22-09-2007.

Fig. 1: External valve view.

Fig. 2: Internal valve view.

Fig. 3: Detail of the apical area in external view.

Fig. 4: Detail of the apical area in internal view.

Eolimna

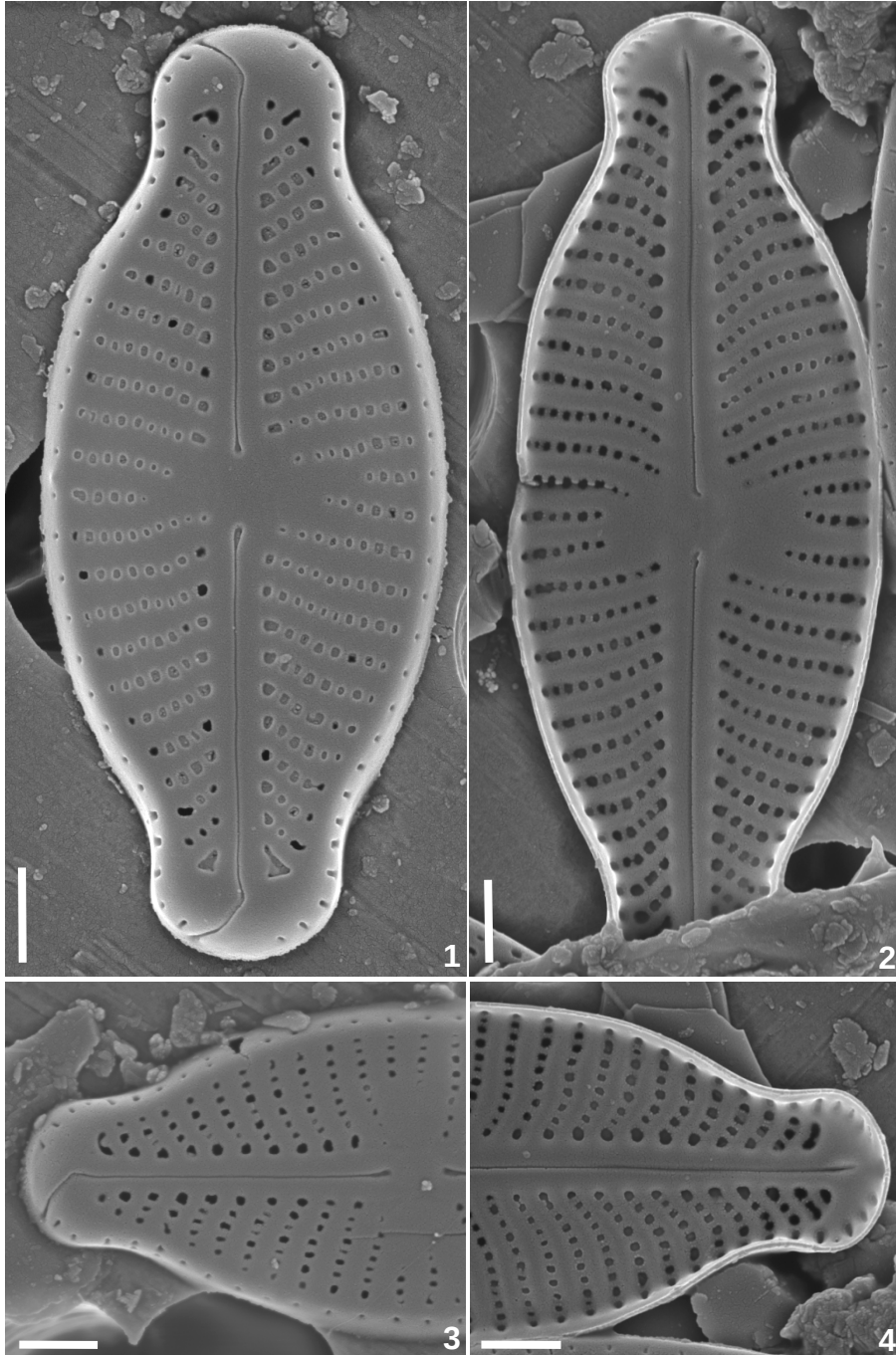


Plate 214

Figs 1-5: *Navicula schmassmannii* Hustedt, p. 44

Scale bars = 1 μm

Figs 1-5: Barcelos, Cávado River (Cávado basin), 22-09-2007.

Figs 1, 2: External valve view.

Fig. 3: Internal valve view.

Fig. 4: Detail of the apical area in external view.

Fig. 5: Detail of the apical area in internal view.

Navicula

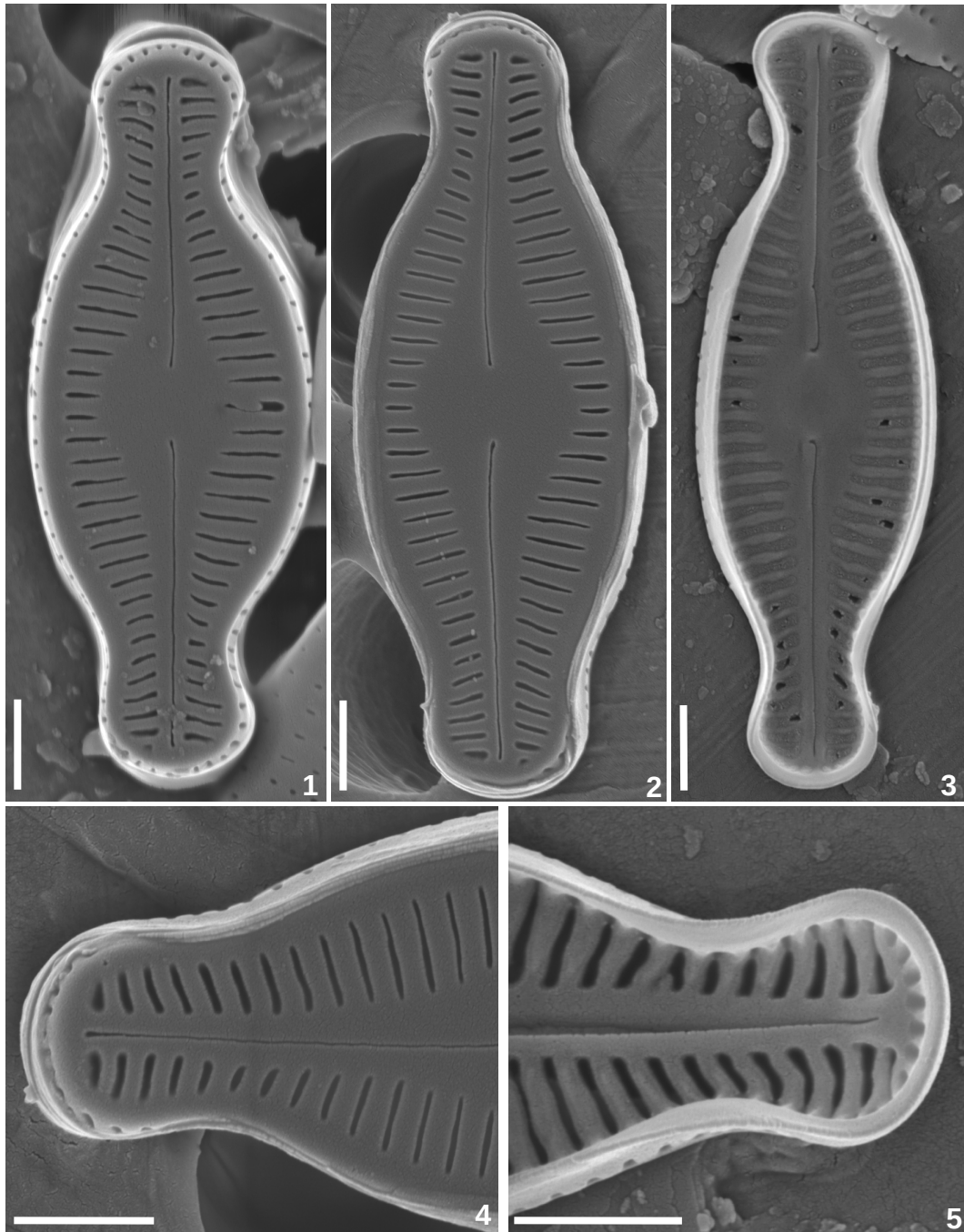


Plate 215

LM: x1500

Figs 1-17: *Navicula tripunctata* (O.F. Müller) Bory, p. 44 [NTPT]

Scale bar = 10 μm

Figs 1-17: Valada, Seiça Stream (Tejo basin), 26-06-2006.

Figs 1-8, 10-17: Valve view.

Fig. 9: Girdle view.

Navicula

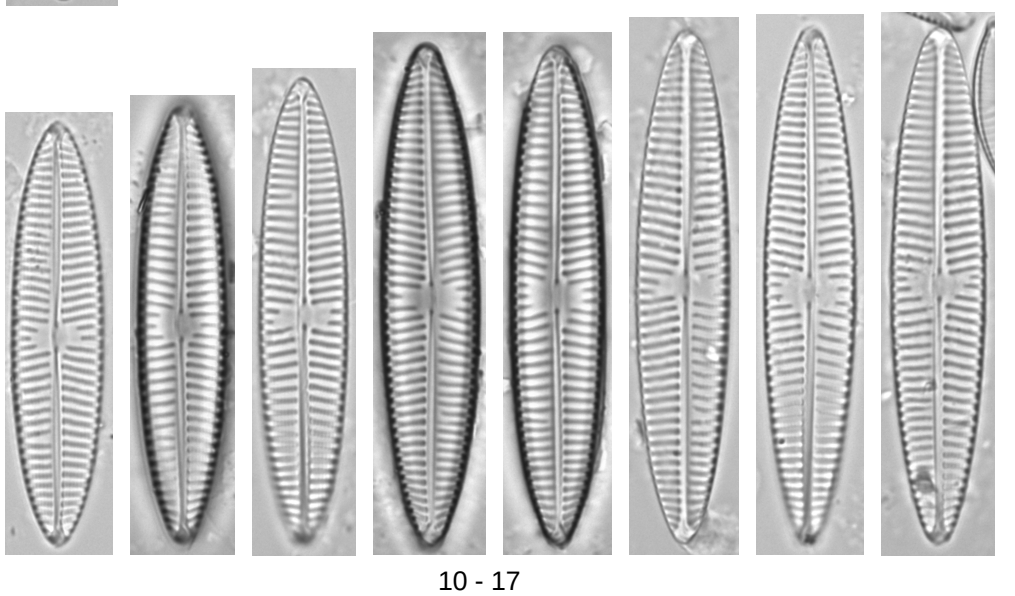
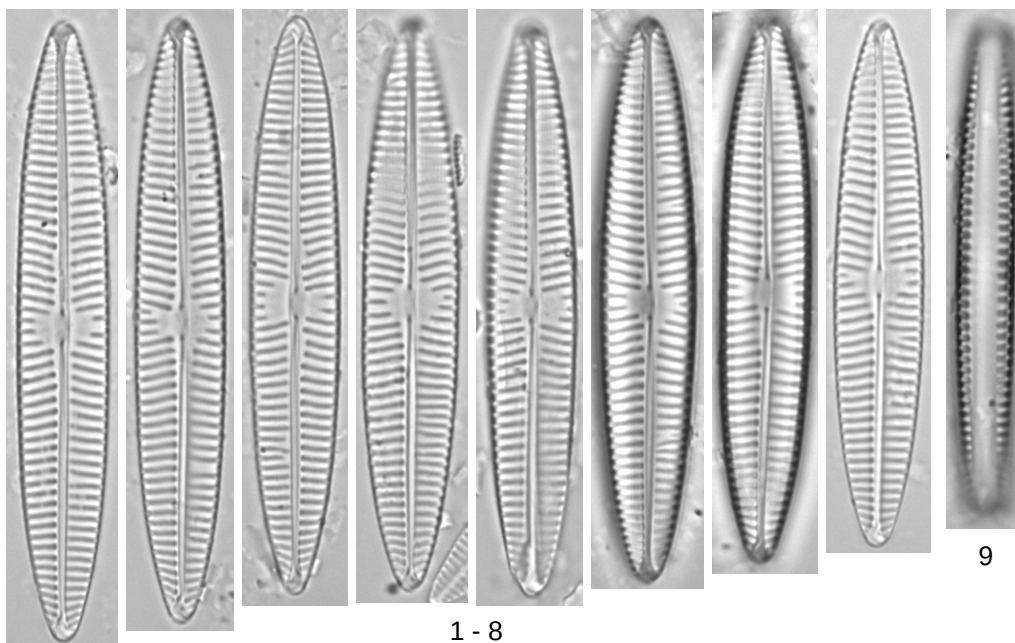


Plate 216

LM: x1500

Figs 1-7: *Navicula radios*a Kützinger, p. 43 [NRAD]

Figs 8-17: *Navicula gregaria* Donkin, p. 43 [NGRE]

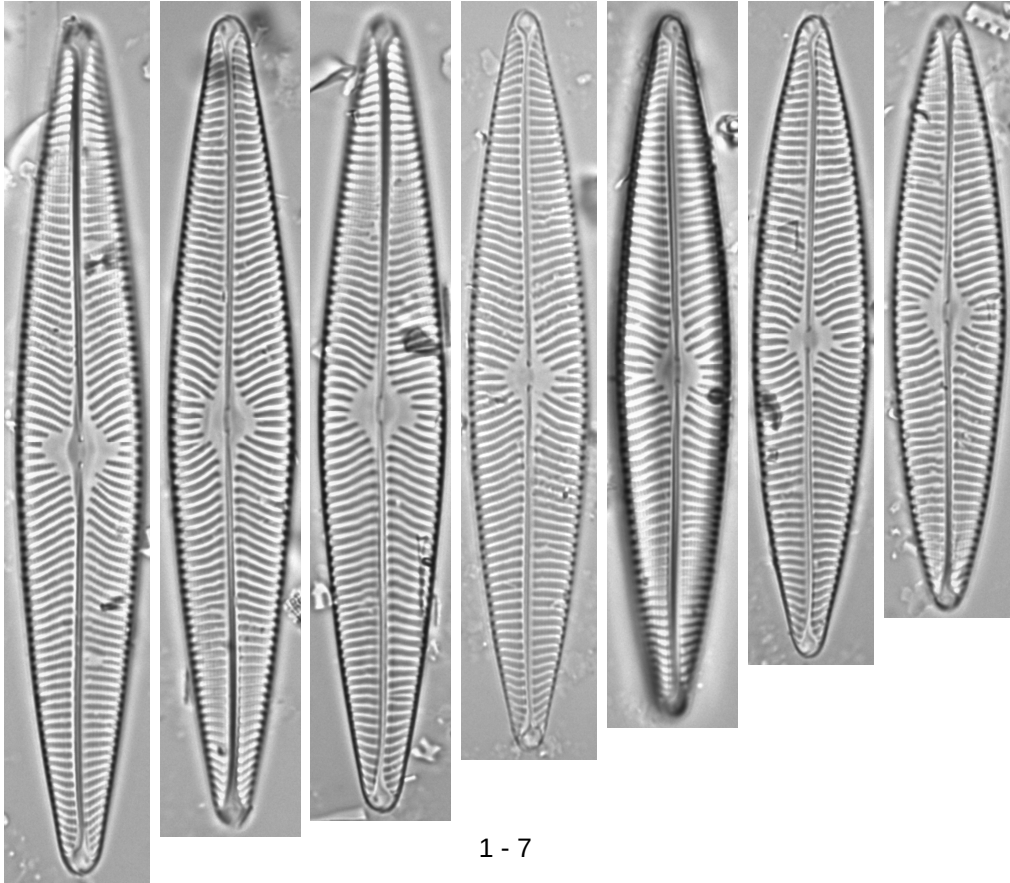
Scale bar = 10 μ m

Figs 1-7: Casalinhas, Campo Stream (Tejo basin), 16-06-2006.

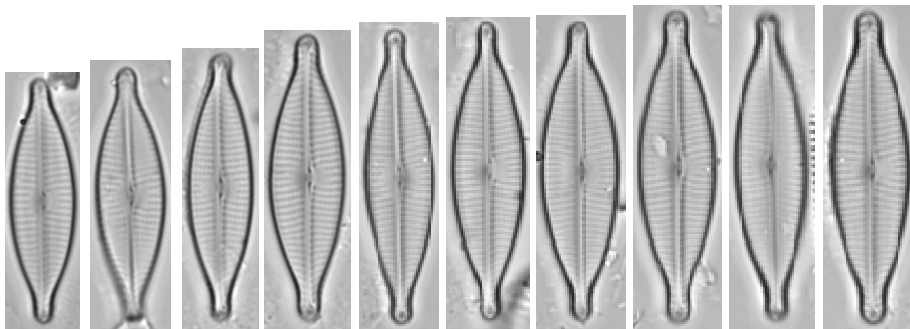
Figs 8-17: Peramanca Stream (Sado basin), 05-04-2006.

Figs 1-17: Valve view.

Navicula



1 - 7



8 - 17



Plate 217

LM: x1500

Figs 1-7: *Navicula lanceolata* (C. Agardh) Kützing, p. 43 [NLAN]

Figs 8-17: *Navicula capitatoradiata* Germain, p. 42 [NCPR]

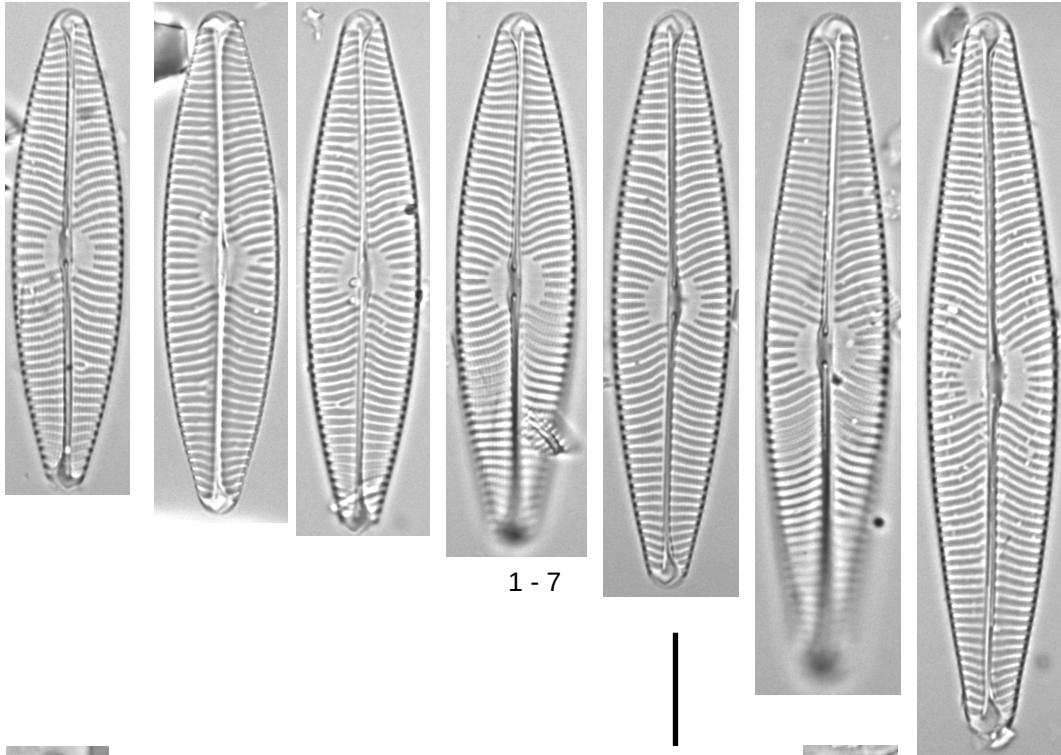
Scale bar = 10 μm

Figs 1-17: Valada, Seiça Stream (Tejo basin), 26-06-2006.

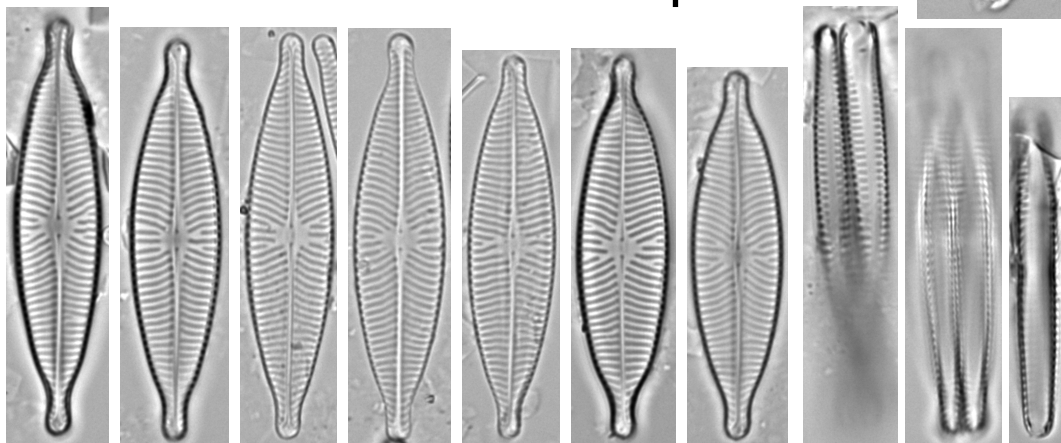
Figs 1-14: Valve view.

Figs 15-17: Girdle view.

Navicula



1 - 7



8 - 14

15 - 17

Plate 218

LM: x1500

Figs 1-30: *Navicula notha* J.H. Wallace, p. 43 [NNOT]

Figs 31-48: *Navicula reichardtiana* Lange-Bertalot, p. 43 [NRCH]

Figs 49-51: *Navicula libonensis* Schoeman, p. 43 [NLIB]

Scale bar = 10 μm

Figs 1-15: Coutada, Zêzere River (Tejo basin), 08-07-2006.

Figs 16-30: Barbaído, Tripeiro River (Tejo basin), 11-07-2006.

Figs 31-39: Malhada, Almuro Stream (Tejo basin), 27-06-2006.

Figs 40-48: Maranhão Reservoir, Seda Stream (Tejo basin), 23-02-2006.

Figs 49-51: Lentiscais, Farropinha Stream (Tejo basin), 15-06-2006.

Figs 1-51: Valve view.