

Pinnularia

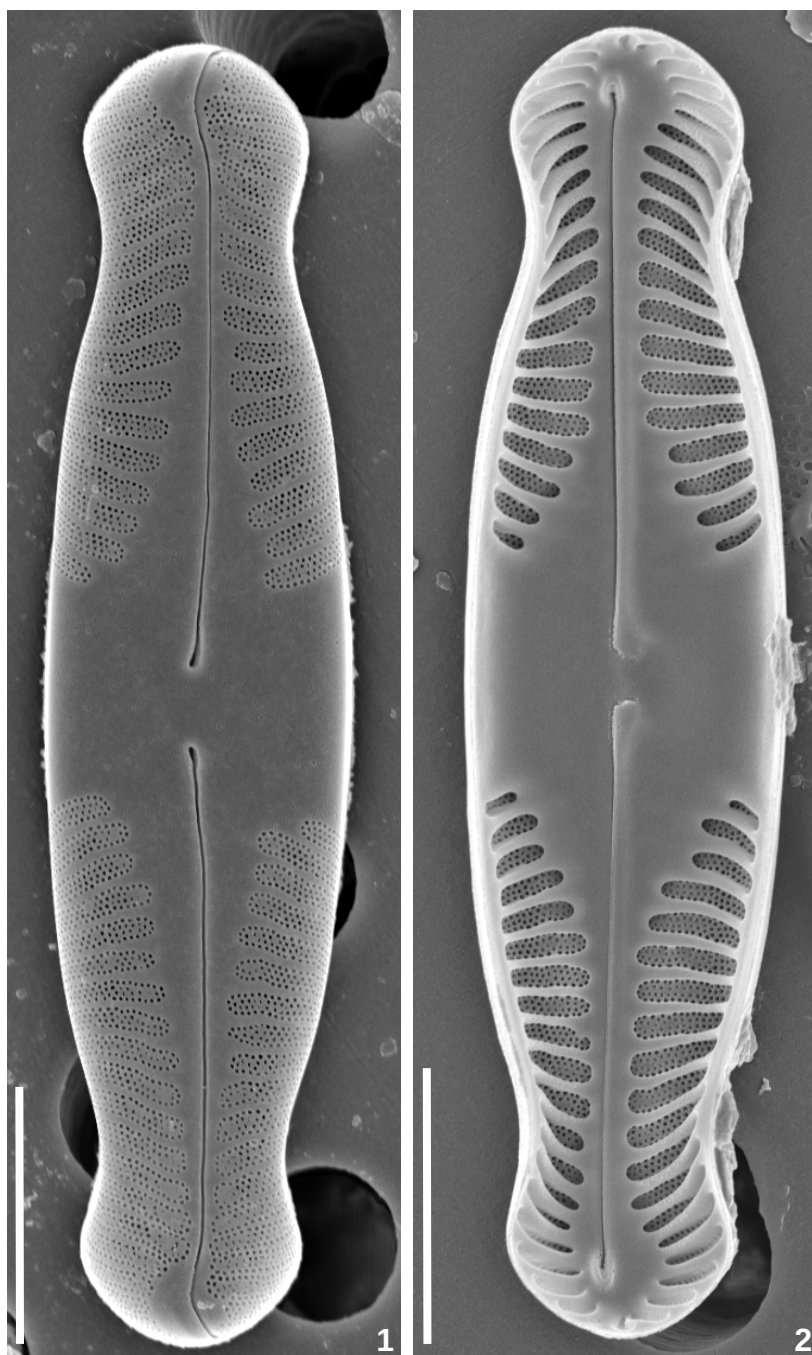


Plate 237

LM: x1000

Fig. 1: *Pinnularia viridiformis* Krammer var. *viridiformis* morphotype 2, p. 40 [PVTW]

Fig. 2: *Pinnularia stidolphii* Krammer, p. 40 [PSDO]

Scale bar = 10 μ m

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

Fig. 2: Prata Stream (Sado basin), 02-06-2006.

Figs 1, 2: Valve view.

Pinnularia

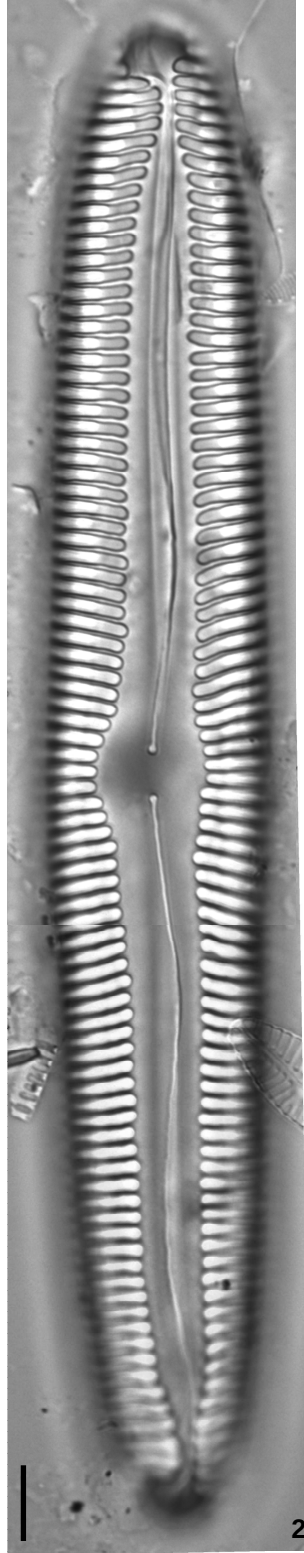
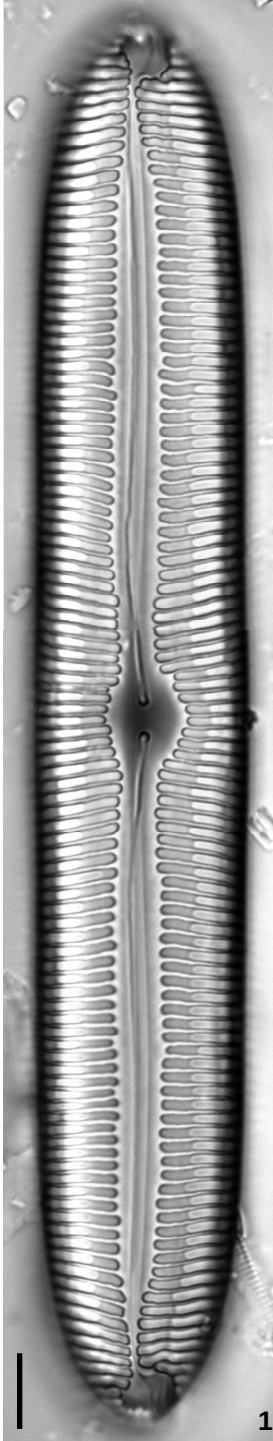


Plate 238

LM: x1500

Figs 1-22: *Geissleria decussis* (Østrup) Lange-Bertalot & Metzeltin, p. 41 [GDEC]

Figs 23-38: *Geissleria* aff. *schoenfeldii* (Hustedt) Lange-Bertalot & Metzeltin, p. 41

Figs 39-52: *Geissleria* sp., p. 41 [GESP]

Scale bar = 10 µm

Figs 1-11, 23-52: Amieira, Tejo River (Tejo basin), 06-07-2006.

Figs 12-22: Belmonte, Zêzere River (Tejo basin), 07-07-2006.

Figs 1-52: Valve view.

Geissleria

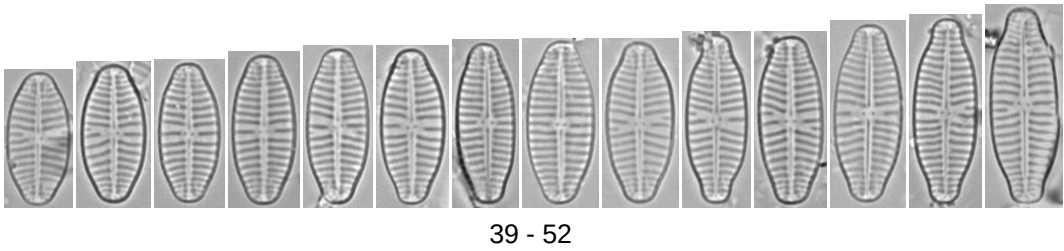
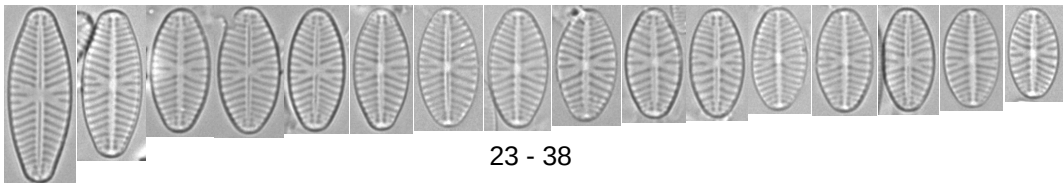
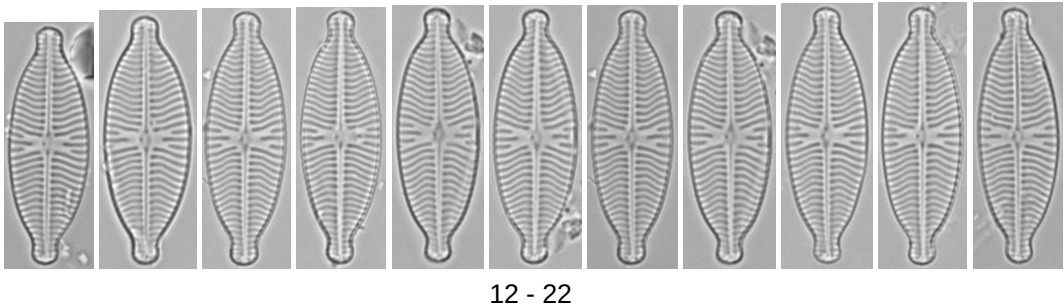
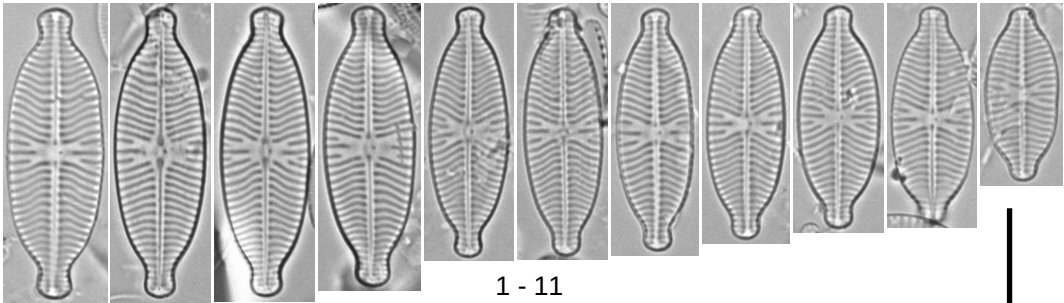


Plate 239

Figs 1-4: *Geissleria* aff. *schoenfeldii* (Hustedt) Lange-Bertalot & Metzeltin, p. 41

Scale bars = 1 μm

Figs 1-4: Amieira, Tejo River (Tejo basin), 06-07-2006.

Fig. 1: External valve view.

Fig. 2: Internal valve view.

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

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

Geissleria

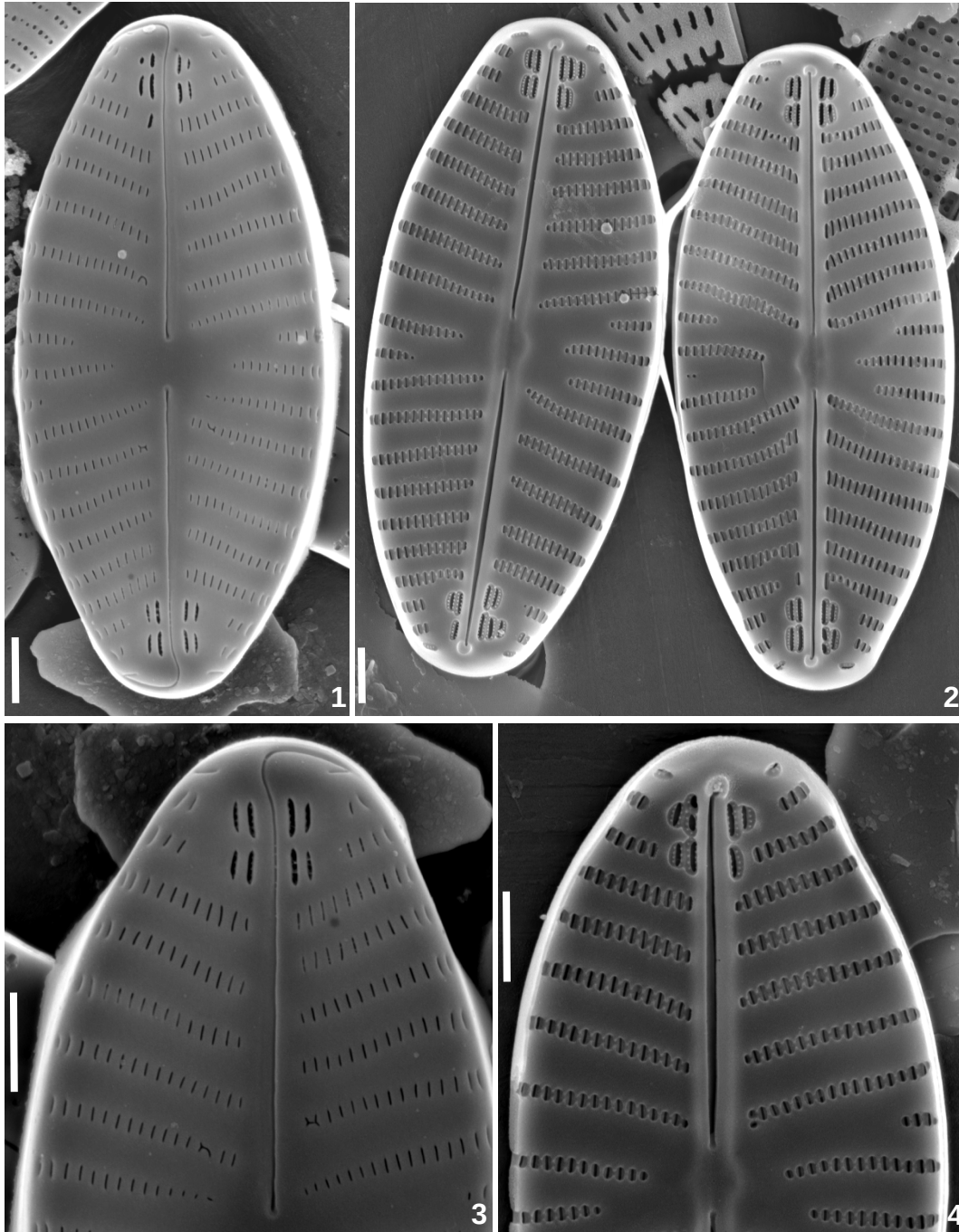


Plate 240

Figs 1-4: *Geissleria* sp., p. 41 [GESP]

Scale bars (Figs 1, 2) = 5 μm Scale bars (Figs 3, 4) = 1 μm

Figs 1-4: Amieira, Tejo River (Tejo basin), 06-07-2006.

Figs 1, 2: Internal valve view.

Fig. 3: Detail of the central area in internal view with the two stigmas.

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

Geissleria

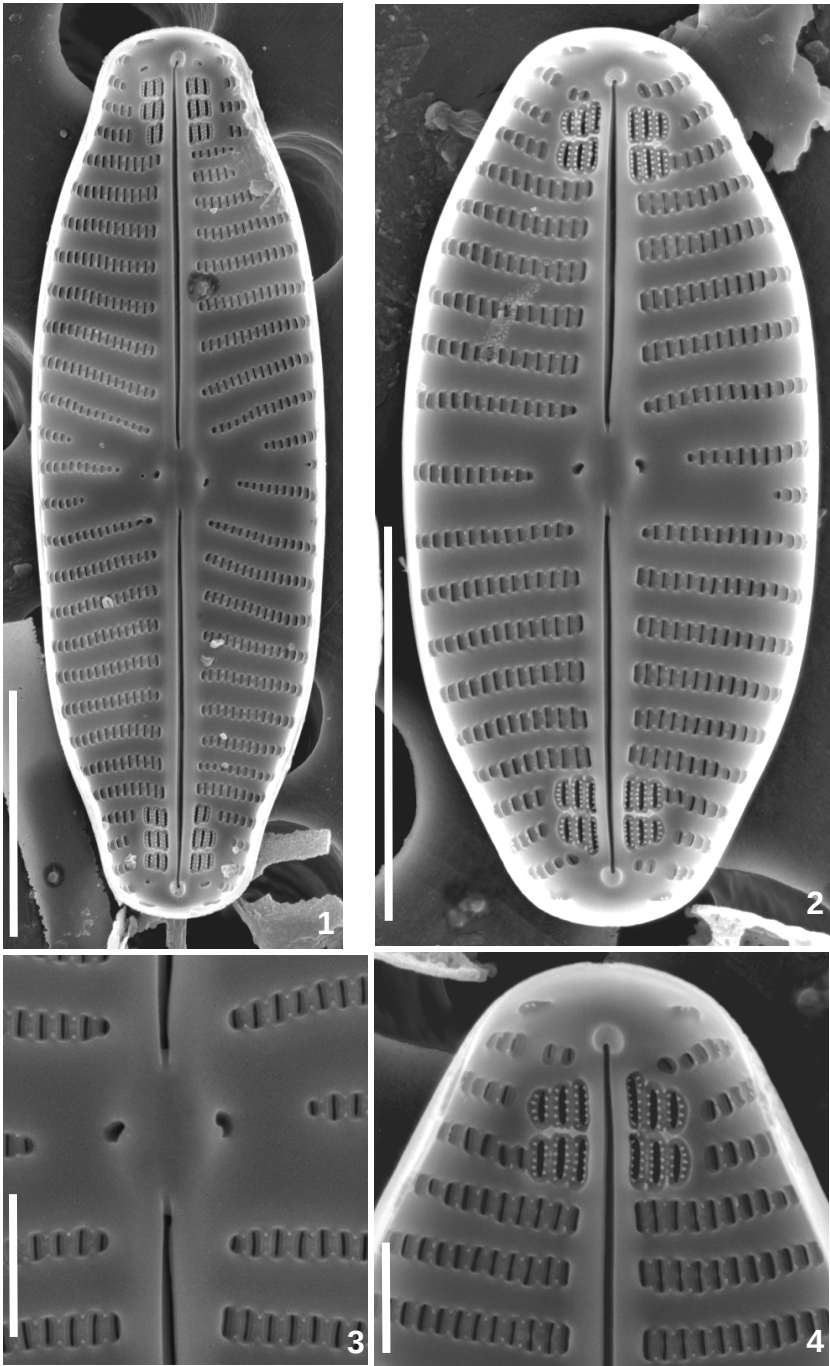


Plate 241

LM: x1500

Figs 1-30: *Hippodonta hungarica* (Grunow) Lange-Bertalot, Metzeltin & Witkowski, p. 42 [HHUN]

Figs 31-42: *Hippodonta capitata* (Ehrenberg) Lange-Bertalot, Metzeltin & Witkowski, p. 41 [HCAP]

Figs 43-80: *Hippodonta pseudacceptata* (Kobayasi) Lange-Bertalot, Metzeltin & Witkowski, p. 42 [HPDA]

Scale bar = 10 µm

Figs 1-15: Prata Stream (Sado basin), 02-06-2006.

Figs 16-30: Peramanca Stream (Sado basin), 05-04-2006.

Figs 31-42: Arroquelas, Lebre Stream (Tejo basin), 30-06-2006.

Figs 43-61: Chamusca, Tejo River (Tejo basin), 06-07-2006.

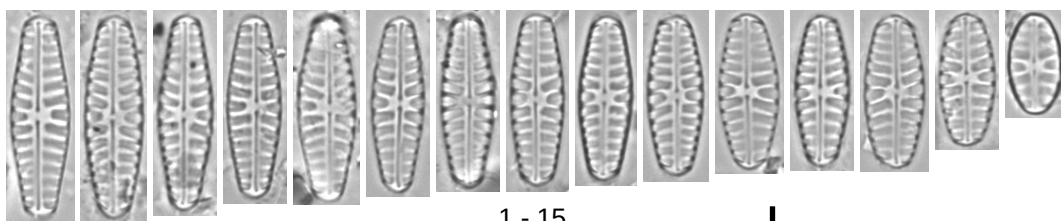
Figs 62-75: Porto de Lagos, Boina Stream (Ribeiras do Algarve basin), 17-04-2006.

Figs 76-80: Lanheses, Lima River (Lima basin), 21-09-2007.

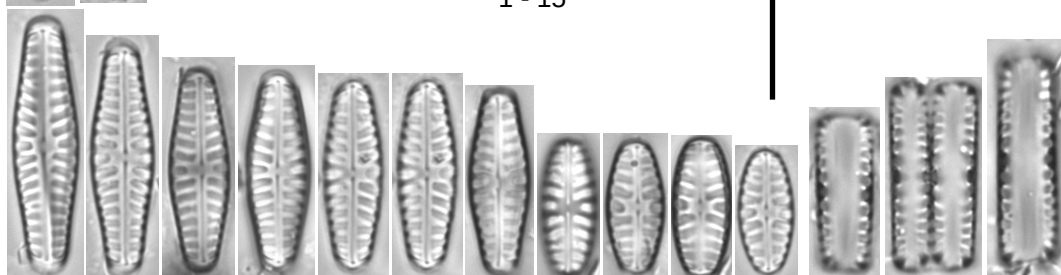
Figs 1-26, 31-41, 43-80: Valve view.

Figs 27-30, 42: Girdle view.

Hippodonta

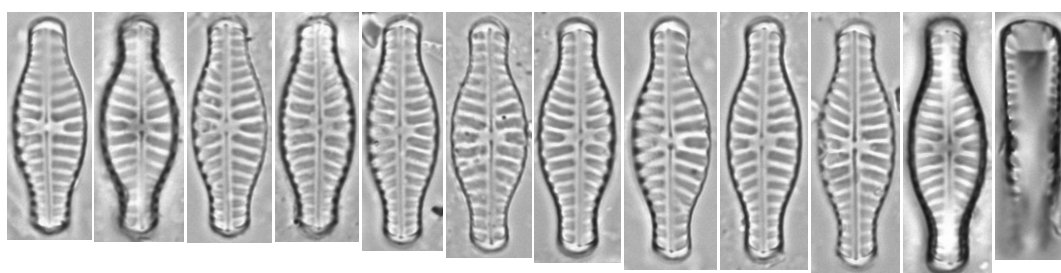


1 - 15



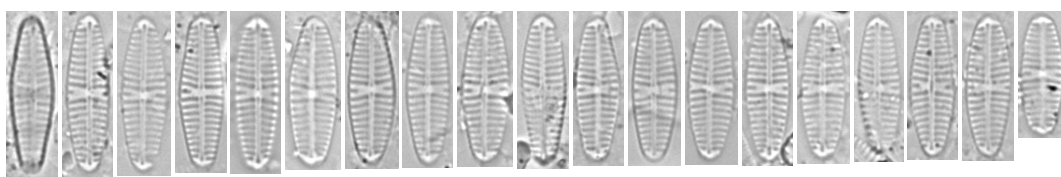
16 - 26

27 - 30

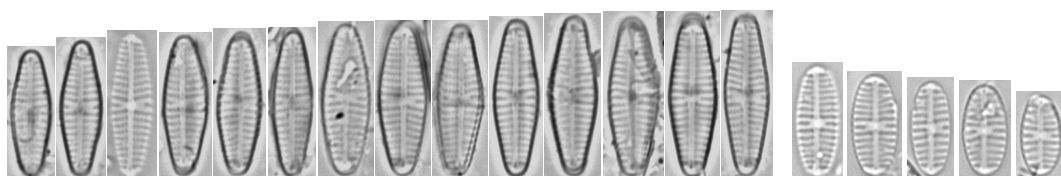


31 - 41

42



43 - 61



62 - 75

76 - 80

Plate 242

Figs 1-4: *Hippodonta hungarica* (Grunow) Lange-Bertalot, Metzeltin & Witkowski, p. 42 [HHUN]

Scale bars = 1 μm

Figs 1-4: Peramanca Stream (Sado basin), 05-04-2006.

Fig. 1: External valve view.

Fig. 2: Internal valve view.

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

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

Hippodonta

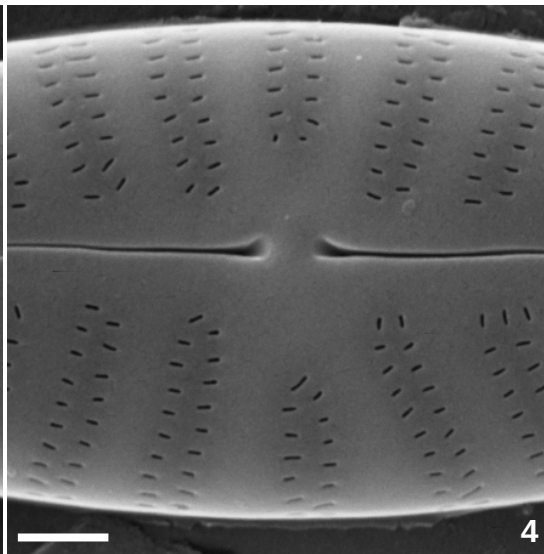
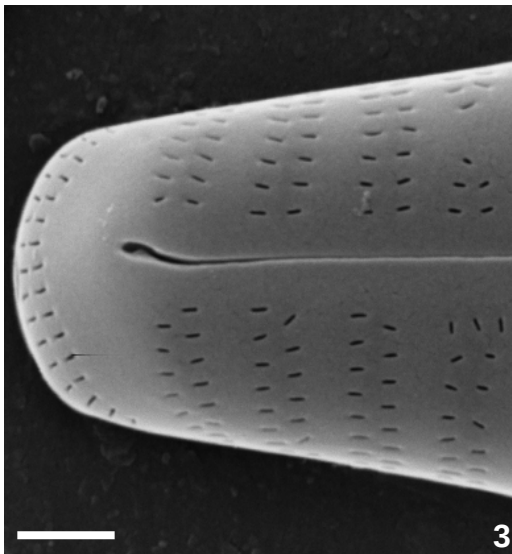
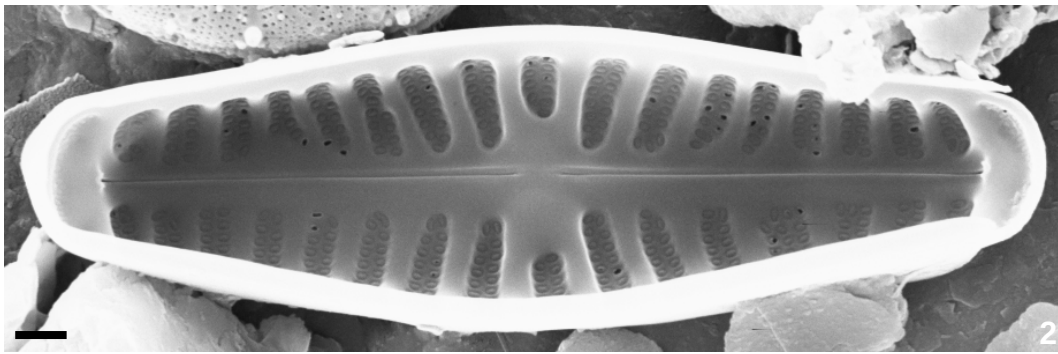
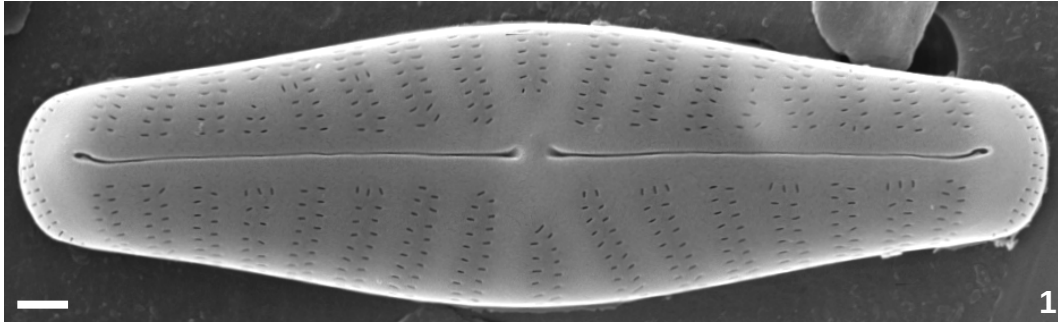


Plate 243

Figs 1-4: *Hippodonta pseudacceptata* (Kobayasi) Lange-Bertalot, Metzeltin & Witkowski, p. 42 [HPDA]

Scale bars = 1 μ m

Figs 1-4: Porto de Lagos, Boina Stream (Ribeiras do Algarve basin), 17-04-2006.

Fig. 1: External valve view.

Fig. 2: Internal valve view.

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

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

Hippodonta

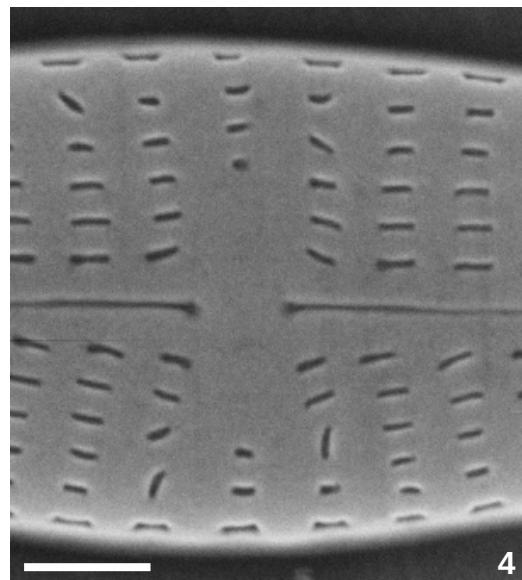
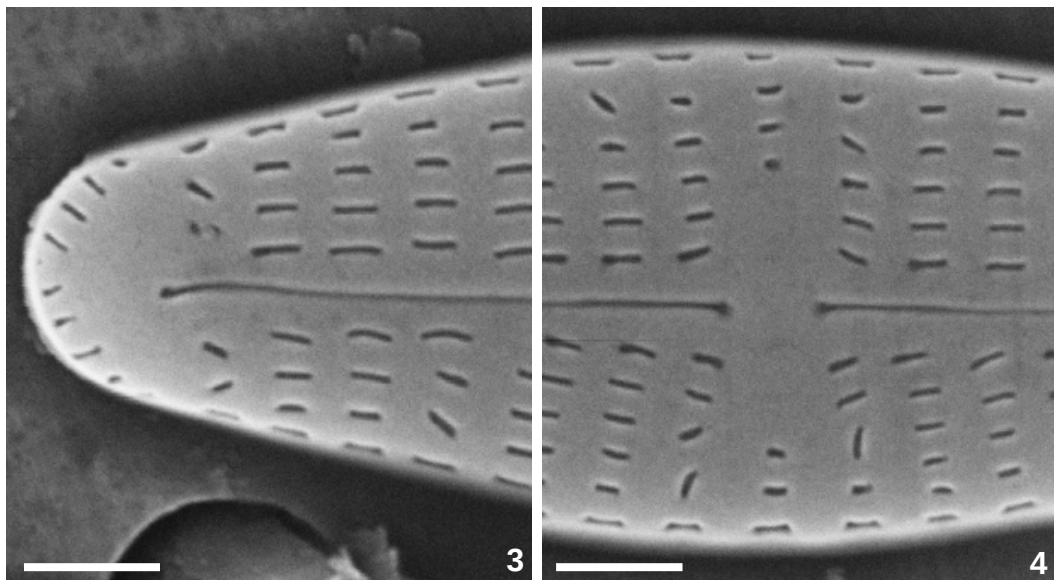
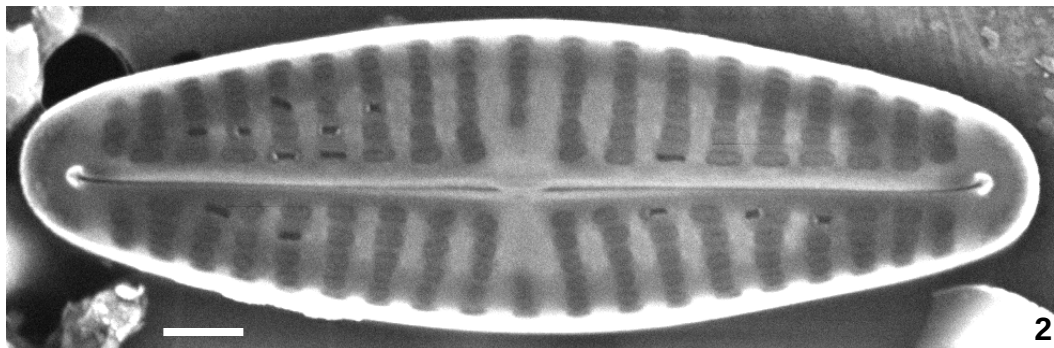
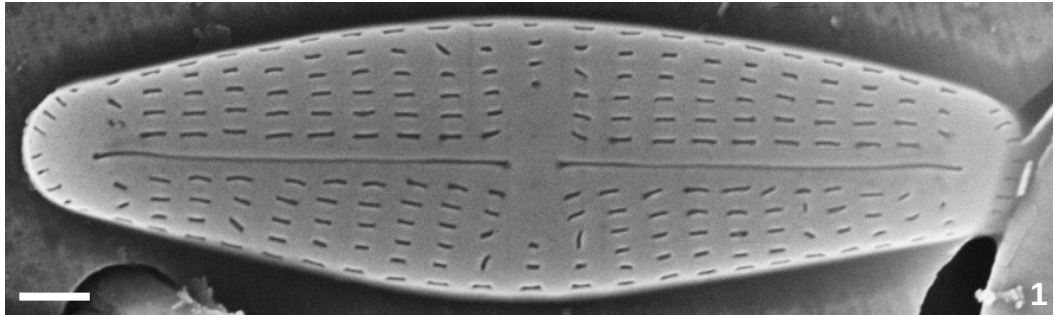


Plate 244

LM: x1500

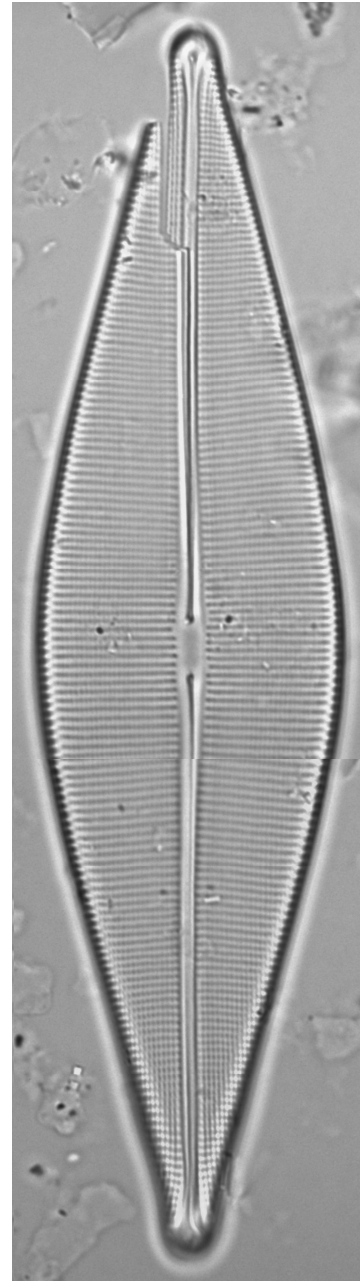
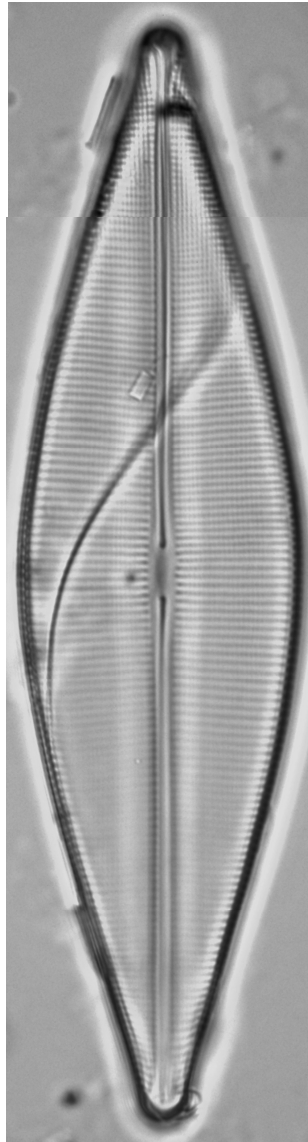
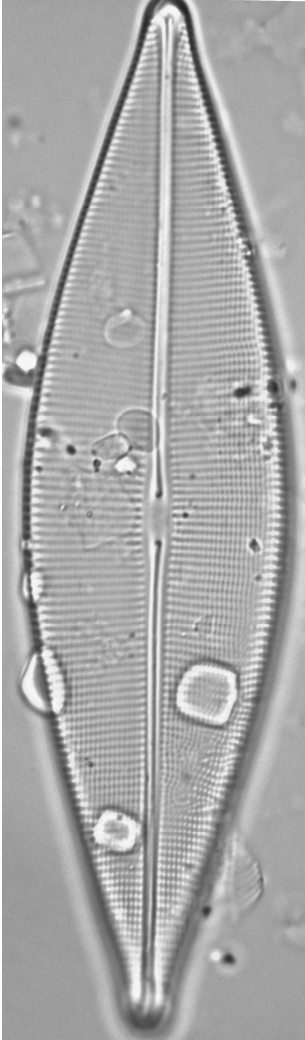
Figs 1-3: *Craticula cuspidata* (Kützing) D.G. Mann, p. 45 [CRCU]

Scale bar = 10 μm

Figs 1-3: Safareja Stream (Guadiana basin), 27-04-2006.

Figs 1-3: Valve view.

Craticula



1 - 3

Plate 245

LM: x1500

Figs 1-9: *Amphora lange-bertalotii* var. *tenuis* Levkov & Metzeltin, p. 45 [ALGT]

Figs 10-27: *Amphora copulata* (Kützing) Schoeman & R.E.M. Archibald, p. 45 [ACOP]

Figs 28-47: *Halamphora* aff. *montana* (Krasske) Levkov, p. 45

Scale bar = 10 μm

Figs 1-9: Prata Stream (Sado basin), 02-06-2006.

Figs 10-27: Arroquelas, Lebre Stream (Tejo basin), 30-06-2006.

Figs 28-47: Valeira Reservoir, Douro River (Douro basin), 09-08-2006.

Figs 1-8, 11-47: Valve view.

Figs 9, 10: Girdle view.

Amphora
Halamphora

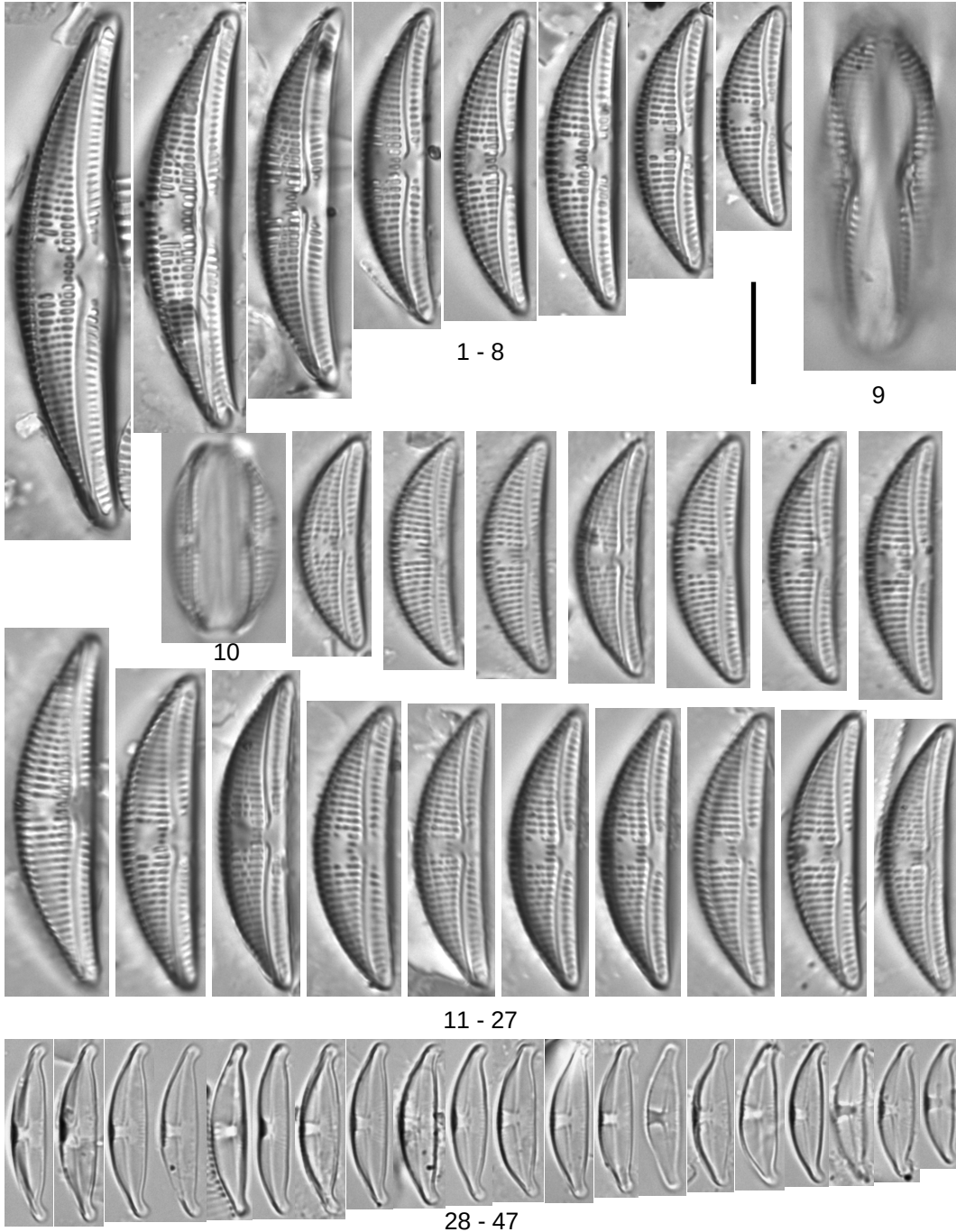


Plate 246

Figs 1, 2: *Halamphora* aff. *montana* (Krasske) Levkov, p. 45

Scale bars (Figs 1, 2) = 5 μm

Figs 1, 2: Valeira Reservoir, Douro River (Douro basin), 09-08-2006.

Fig. 1: External valve view.

Figs 2: Internal valve view.

Halamphora

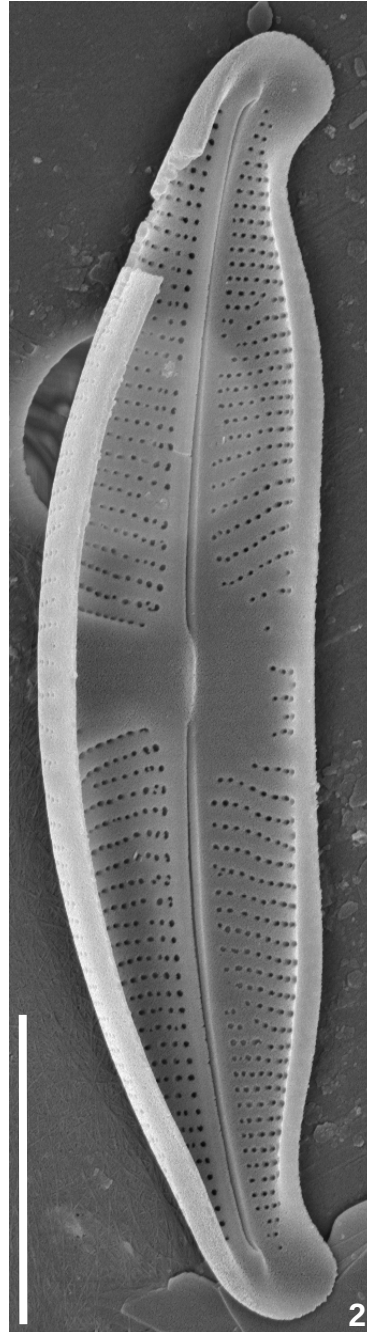
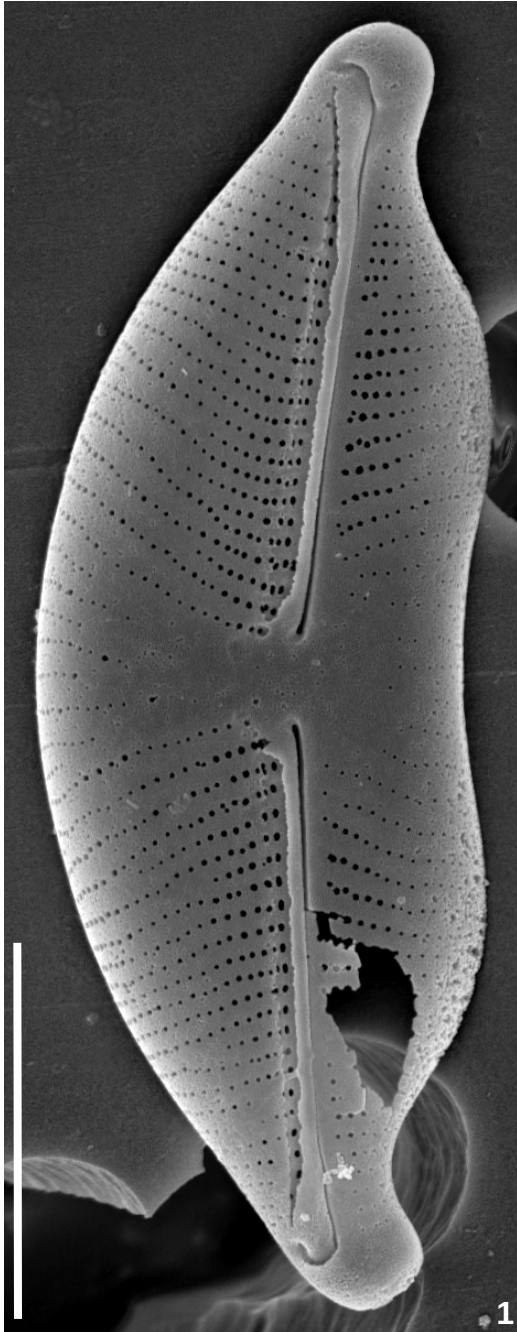


Plate 247

LM: x1500

Figs 1-35: *Amphora pediculus* (Kützing) Grunow, p. 45 [APED]

Figs 36-42: *Amphora indistincta* Levkov, p. 45 [AMID]

Figs 43-49: *Halamphora pseudomontana* (Cholnoky) Levkov, p. 46 [HPMO]

Figs 50-54: *Halamphora* sp., p. 46

Figs 55-69: *Halamphora veneta* (Kützing) Levkov, p. 46 [HVEN]

Scale bar = 10 μm

Figs 1-19: Azenha, Alfambras Stream (Ribeiras do Algarve basin), 15-04-2006.

Figs 20-42: Tôr, Algibre Stream (Ribeiras do Algarve basin), 02-03-2006.

Figs 43-54: Odemira, Mira River (Mira basin), 09-05-2006.

Figs 55-69: Peramanca Stream (Sado basin), 05-04-2006.

Figs 1-15, 20-32, 36-41, 43-54, 58-69: Valve view.

Figs 16-19, 33-35, 42, 55-57: Girdle view.

Amphora
Halamphora

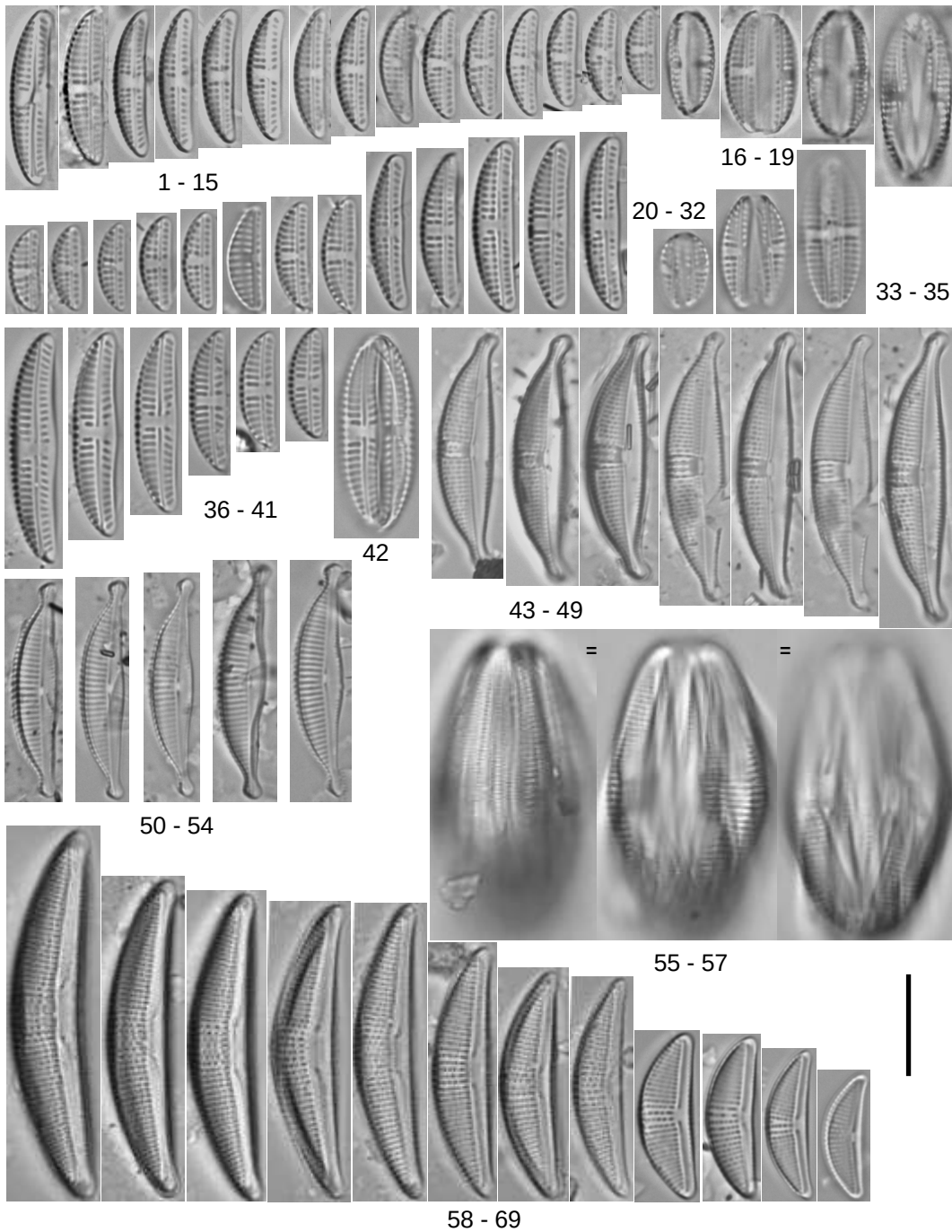


Plate 248

LM: x1500

Figs 1-23: *Nitzschia* sp. 1, p. 48

Figs 24-139: *Nitzschia inconspicua* Grunow, p. 47 [NINC]

Scale bar = 10 μm

Figs 1-23: Amieira, Tejo River (Tejo basin), 06-07-2006.

Figs 24-46: Tôr, Algibre Stream (Ribeiras do Algarve basin), 02-03-2006.

Figs 47-73: Ficalho, Vidigão Stream (Guadiana basin), 27-04-2006.

Figs 74-91: Bensafrim, Machada Stream (Ribeiras do Algarve basin), 02-03-2006.

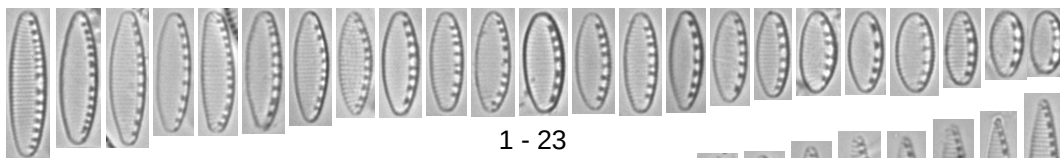
Figs 92-116: Marmelar Stream (Guadiana basin), 05-04-2006.

Figs 117-139: Queimado, Pardiela Stream (Guadiana basin), 25-05-2006.

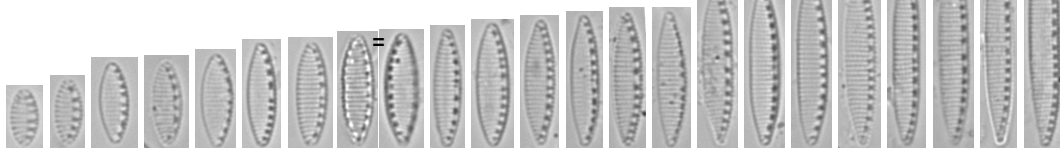
Figs 1-70, 74-88, 96-139: Valve view.

Figs 71-73, 89-95: Girdle view.

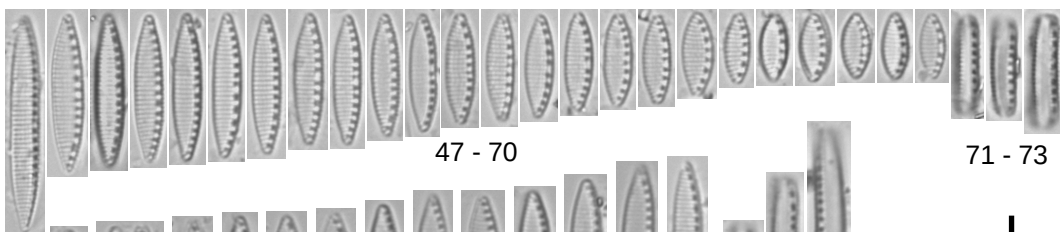
Nitzschia



1 - 23

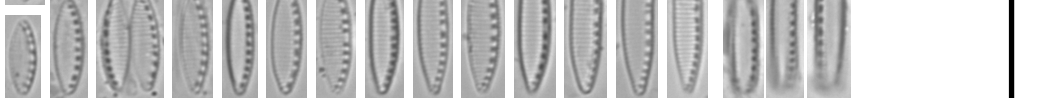


24 - 46



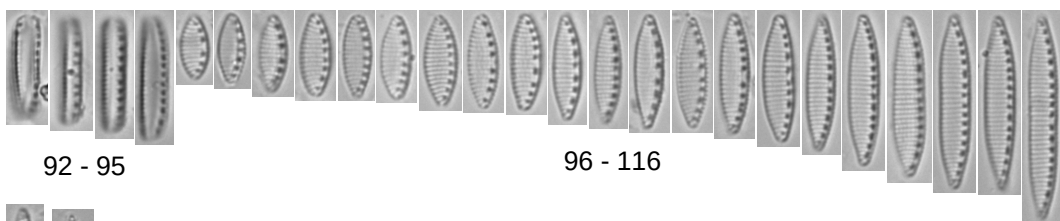
47 - 70

71 - 73



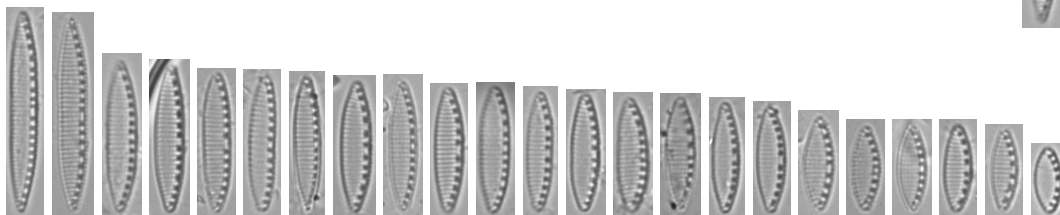
74 - 88

89 - 91



92 - 95

96 - 116



117 - 139

Plate 249

Figs 1-3: *Nitzschia* sp. 1, p. 48

Scale bars = 1 μm

Figs 1-3: Amieira, Tejo River (Tejo basin), 06-07-2006.

Figs 1, 2: External valve view.

Fig. 3: Internal valve view.

Nitzschia

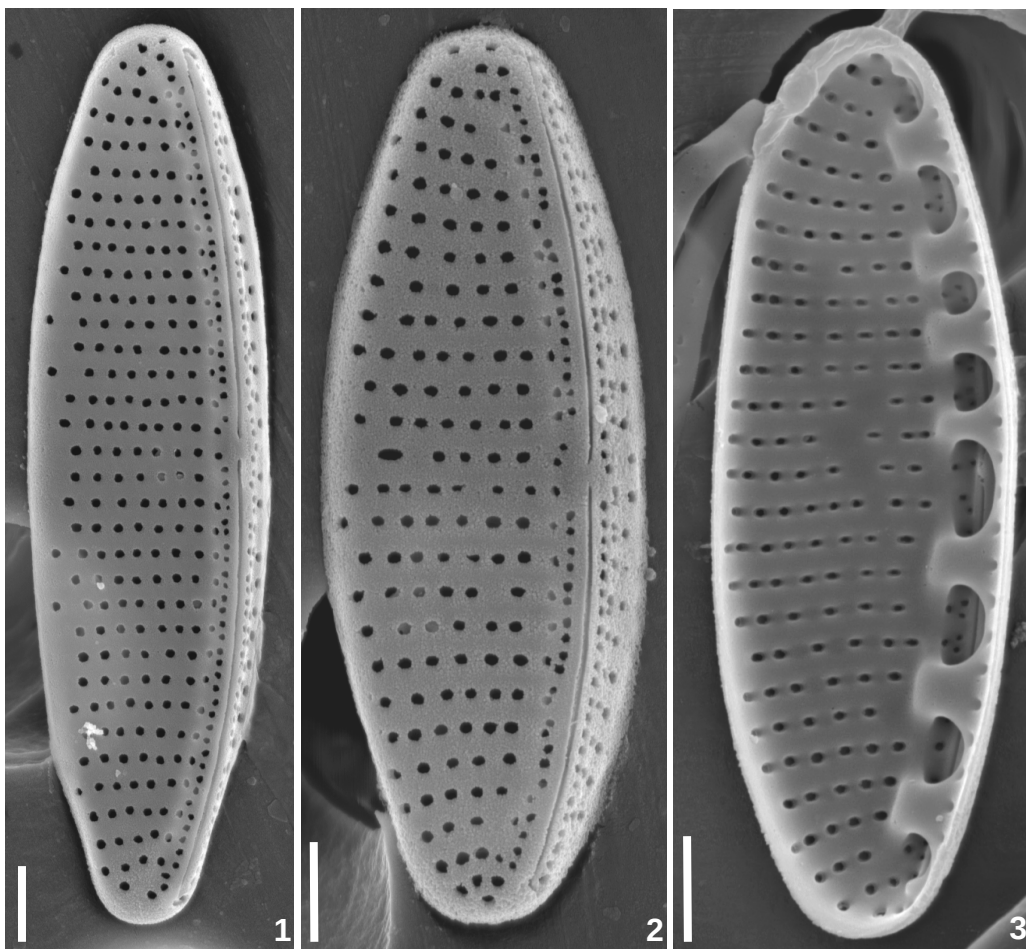


Plate 250

Figs 1-3: *Nitzschia inconspicua* Grunow, p. 47 [NINC]

Scale bars = 1 μm

Figs 1-3: Ficalho, Vidigão Stream (Guadiana basin), 27-04-2006.

Figs 1: External valve view.

Figs 2, 3: Internal valve view.

Nitzschia

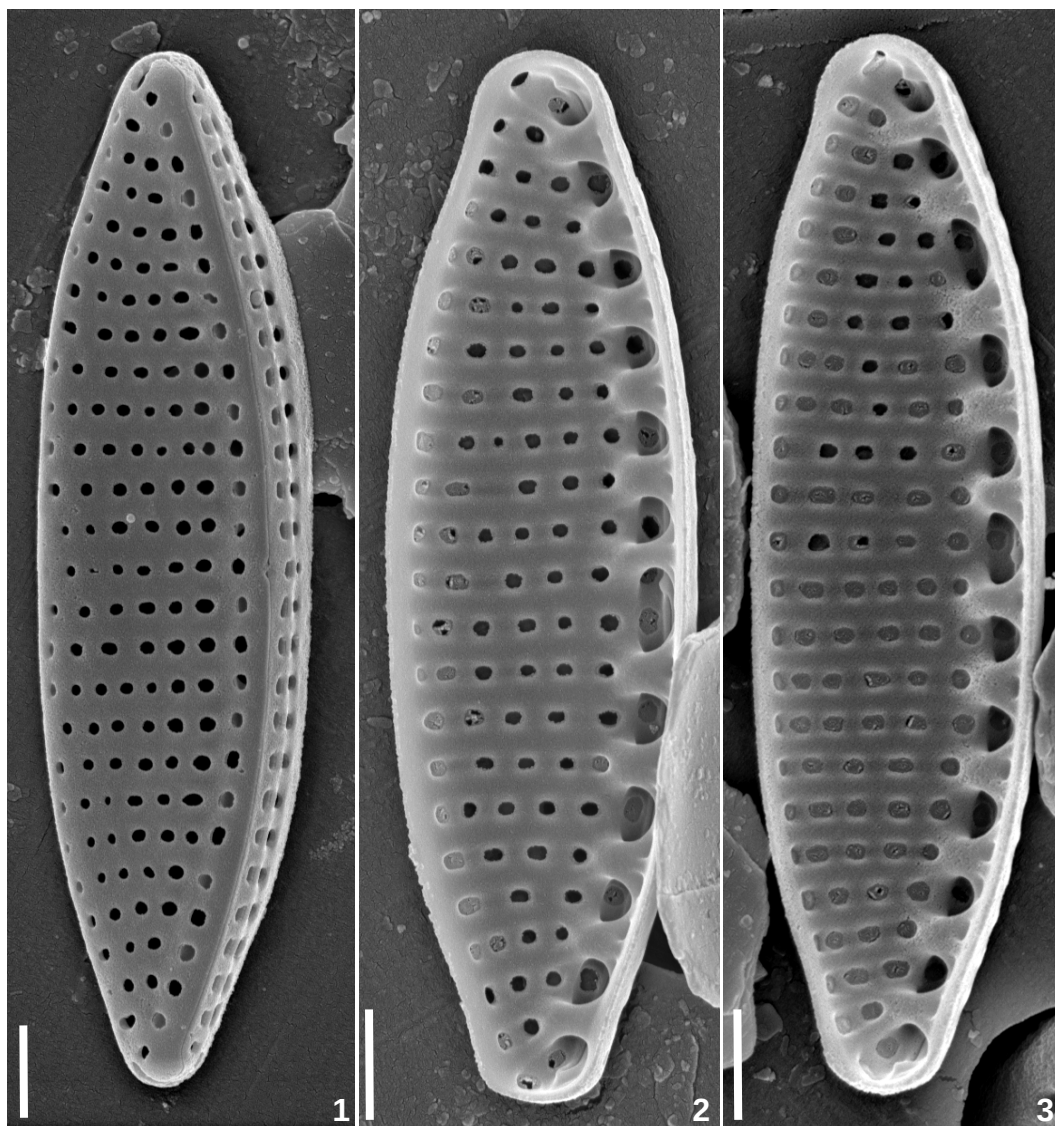


Plate 251

Figs 1-3: *Nitzschia inconspicua* Grunow, p. 47 [NINC]

Scale bars = 1 μm

Figs 1-3: Marmelar Stream (Guadiana basin), 05-04-2006.

Figs 1, 2: External valve view.

Fig. 3: Internal valve view.

Nitzschia

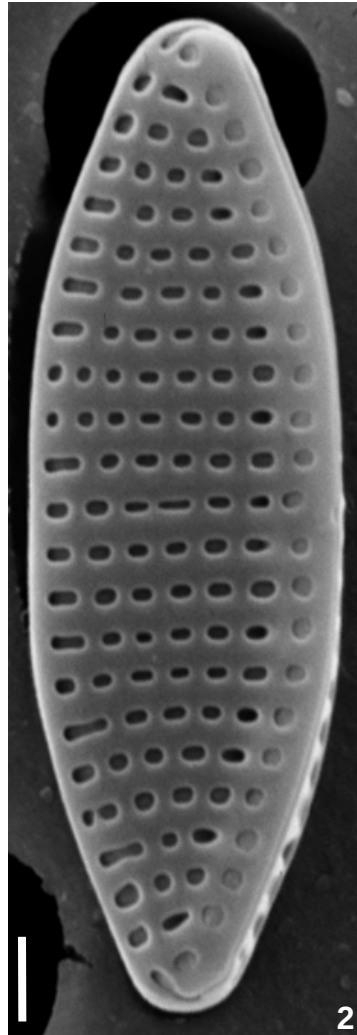
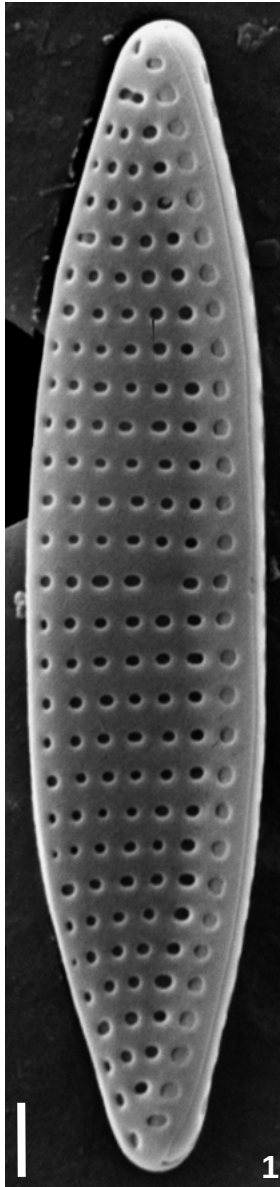


Plate 252

LM: x1500

Figs 1-71: *Nitzschia* sp. 2, p. 48

Figs 72-100: *Nitzschia valdestriata* Aleem & Hustedt, p. 48 [NIVA]

Figs 101-117: *Nitzschia* sp. 3, p. 48

Scale bar = 10 μm

Figs 1-21: Alfundão Stream (Sado basin), 16-05-2006.

Figs 22-37: Safara Stream (Guadiana basin), 27-04-2006.

Figs 38-52: Azambuja Stream (Guadiana basin), 15-05-2006.

Figs 53-71: Xarrama River (Sado basin), 15-05-2006.

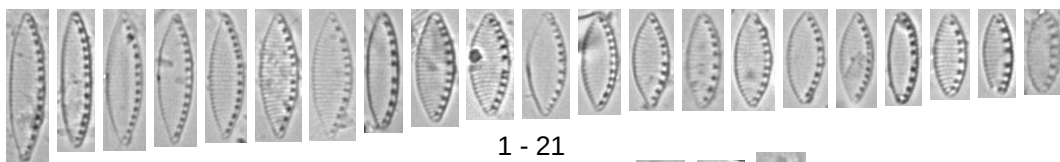
Figs 72-100: Lanheses, Lima River (Lima basin), 21-09-2007.

Figs 101-117: Campinho, Aravil River (Tagus basin), 12-07-2006.

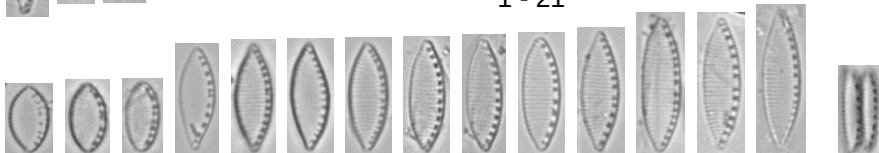
Figs 1-36, 38-49, 53-70, 72-98, 101-117: Valve view.

Figs 37, 50-52, 71, 99, 100: Girdle view.

Nitzschia

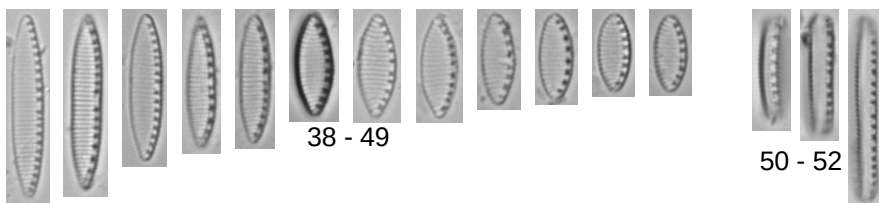


1 - 21



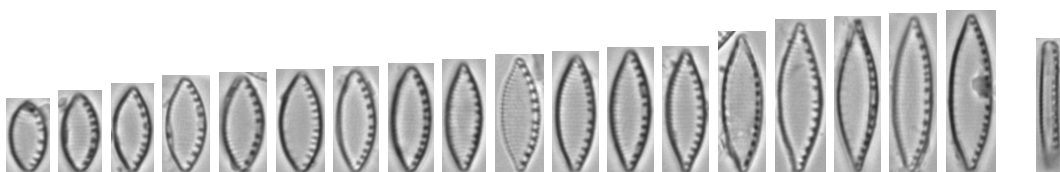
22 - 36

37



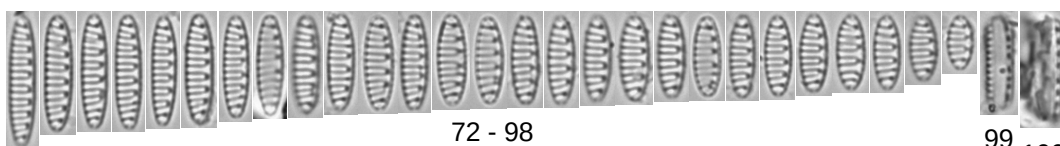
38 - 49

50 - 52



53 - 70

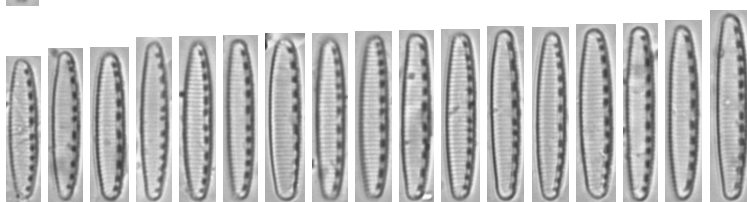
71



72 - 98

99

100



101 - 117

Plate 253

Figs 1-3: *Nitzschia valdestriata* Aleem & Hustedt, p. 48 [NIVA]

Scale bars = 1 μm

Figs 1-3: Lanheses, Lima River (Lima basin), 21-09-2007.

Figs 1, 2: External valve view.

Fig. 3: Internal valve view.

Nitzschia

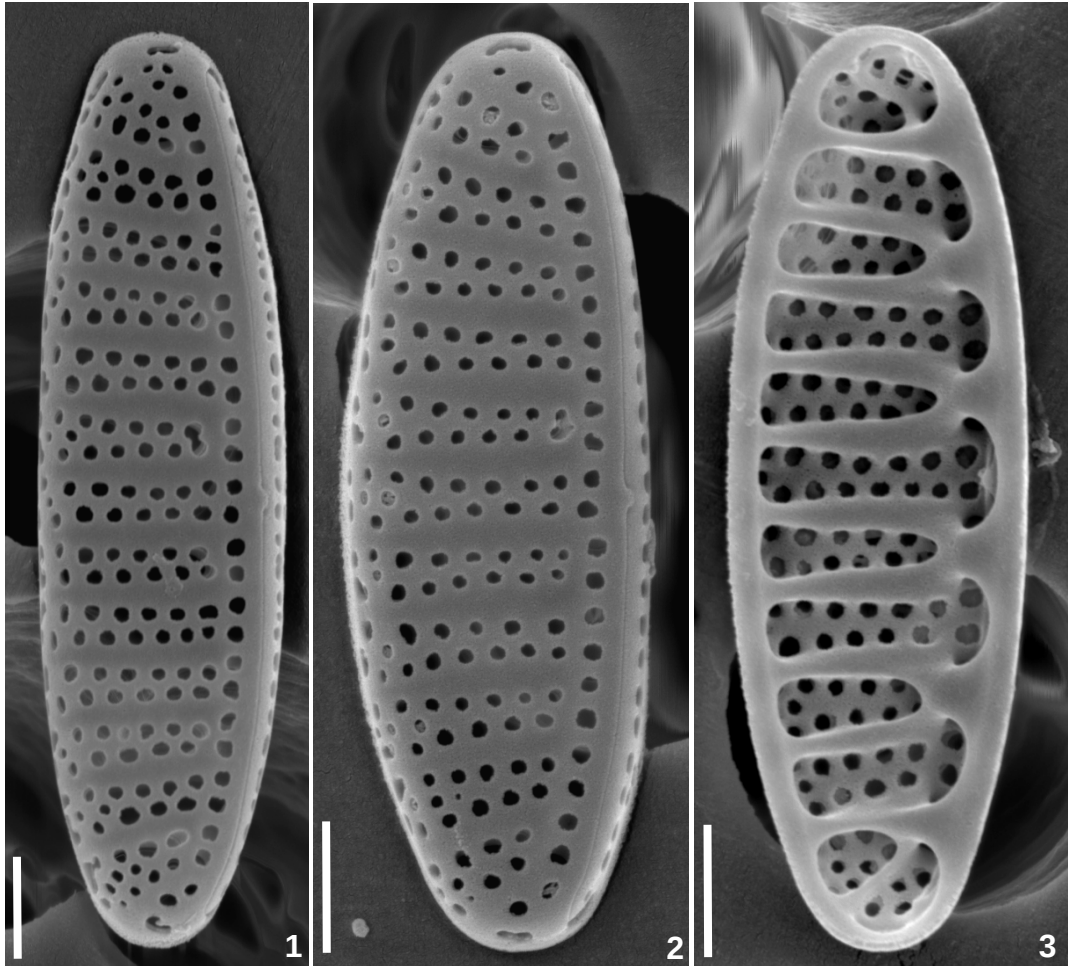


Plate 254

Figs 1-7: *Nitzschia* sp. 3, p. 48

Scale bars = 1 μm

Figs 1-7: Campinho, Aravil River (Tejo basin), 12-07-2006.

Fig. 1: External valve view.

Fig. 2: Internal valve view.

Fig. 3: Girdle view.

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

Figs 5, 6: Detail of the apical area in internal view.

Fig. 7: Detail of the central area in external view.