

Fragilaria

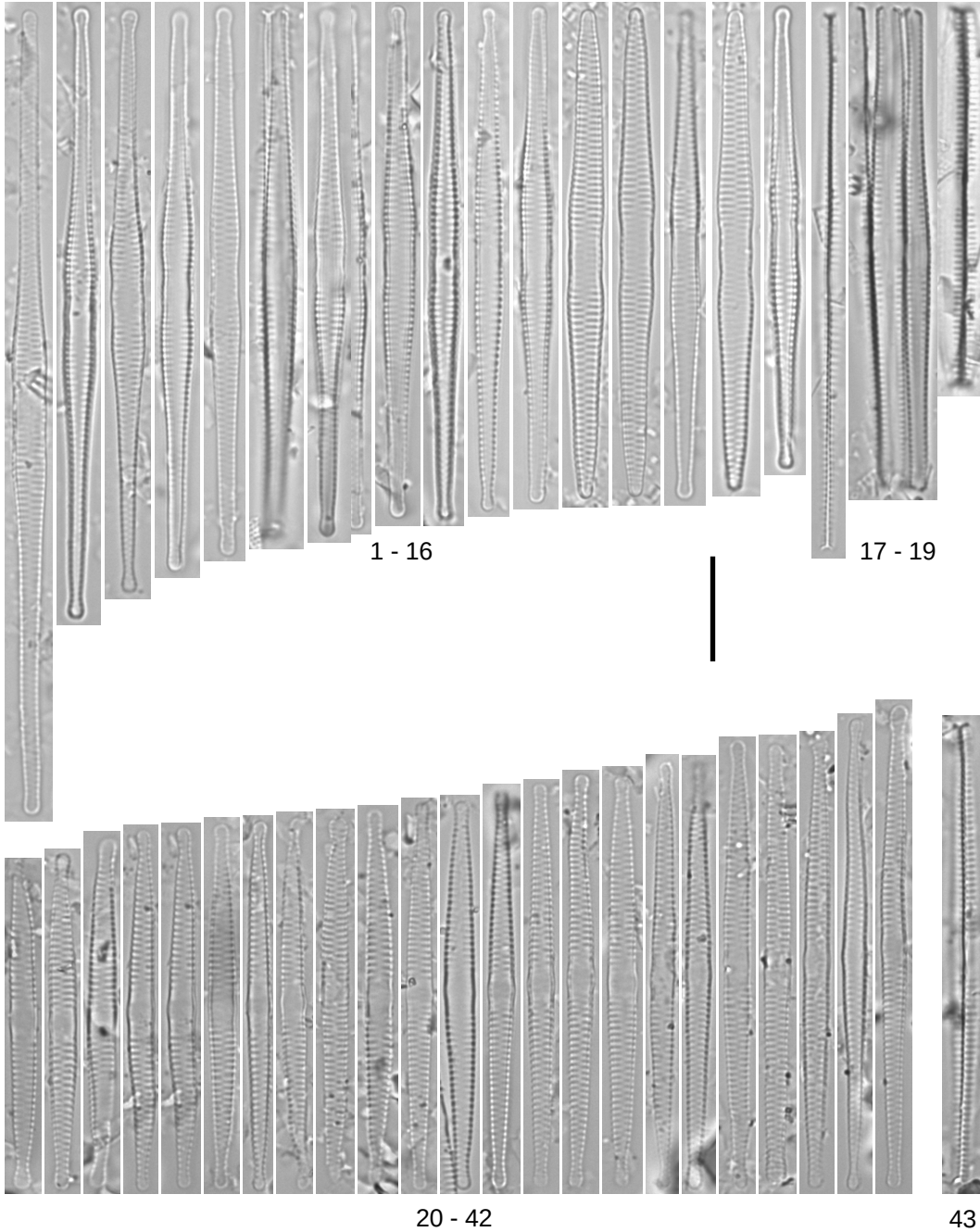


Plate 24

LM: x1500

Figs 1-42: *Fragilaria gracilis* Østrup, p. 12 [FGRA]

Figs 43-62: *Fragilaria* cf. *tenera* (W. Smith) Lange-Bertalot, p. 13

Scale bar = 10 µm

Figs 1-23: Oleiros, Seca Stream (Ribeiras do Algarve basin), 16-04-2006.

Figs 24-42: Foz do Carvalhoso, Seixe Stream (Ribeiras do Algarve basin), 15-04-2006.

Figs 43-62: Santa Luzia Reservoir, Unhais River (Tagus basin), 10-05-2006.

Figs 5-43: Valve view.

Figs 1-4, 44: Girdle view.

Fragilaria

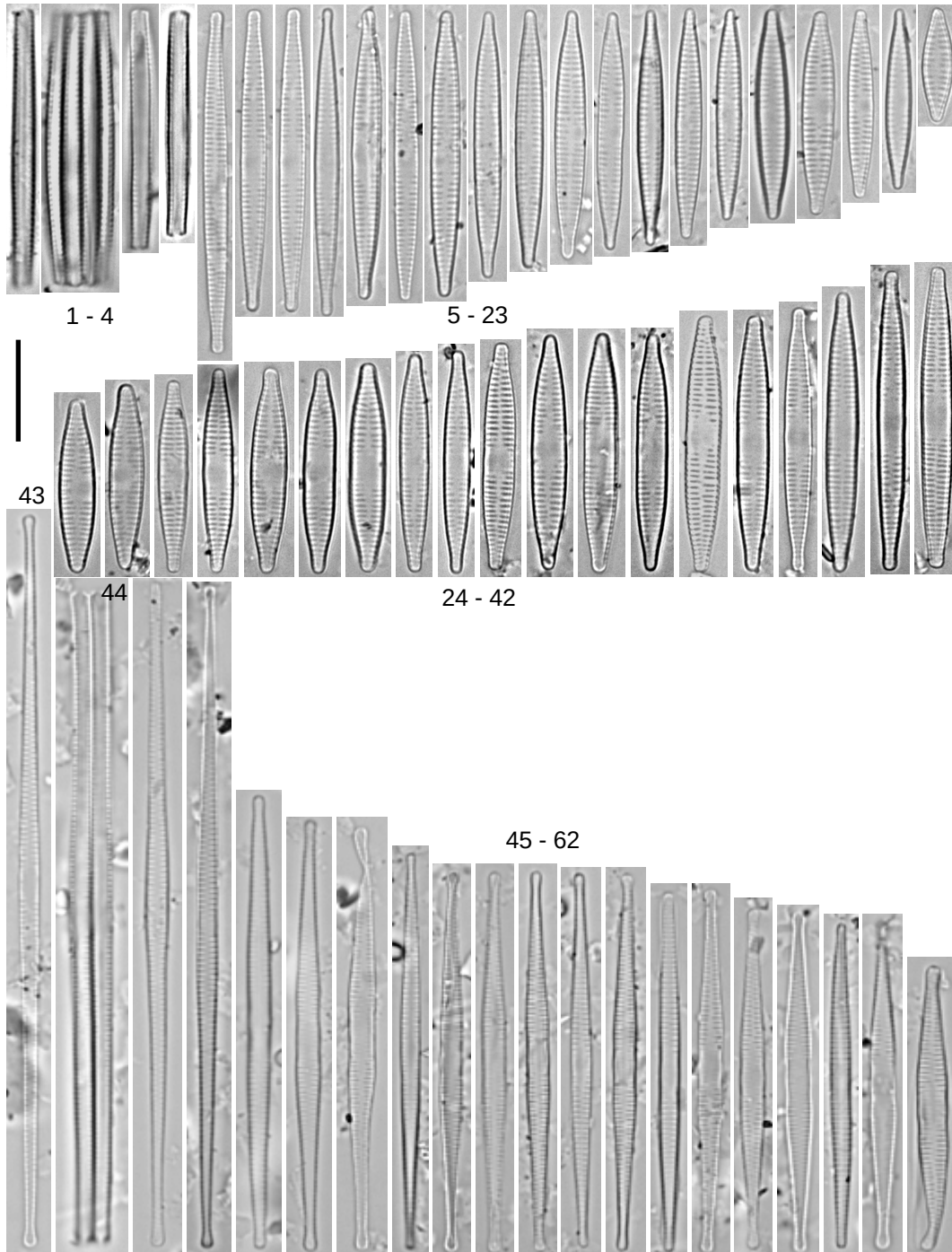


Plate 25

Figs 1-5: *Fragilaria gracilis* Østrup, p. 12 [FGRA]

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

Figs 1-5: Foz do Carvalho, Seixe Stream (Ribeiras do Algarve basin), 15-04-2006.

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.

Fragilaria

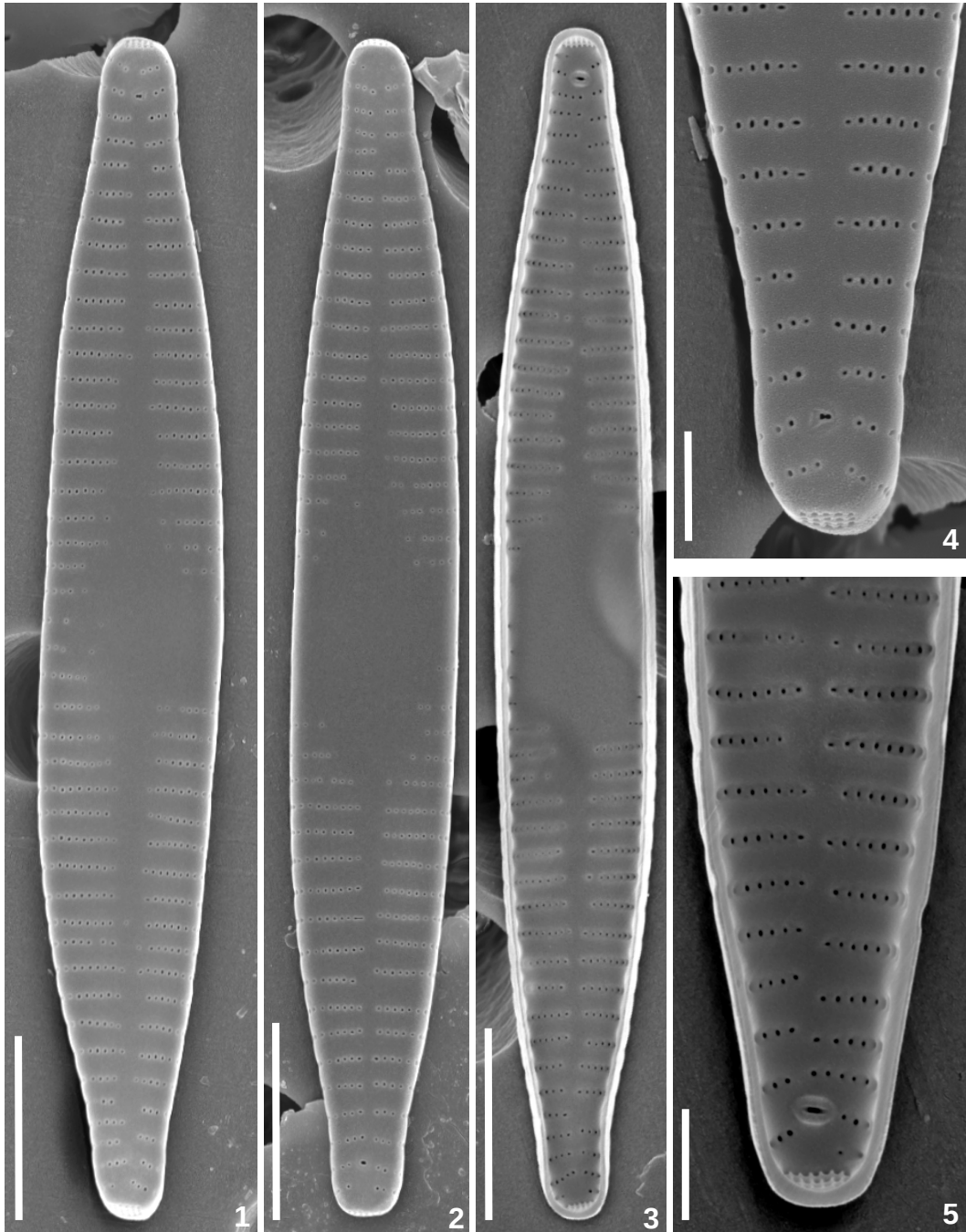


Plate 26

Figs 1-6: *Fragilaria* cf. *tenera* (W. Smith) Lange-Bertalot, p. 13

Scale bars (Figs 1, 2) = 5 μm Scale bars (Figs 3-6) = 1 μm

Figs 1-6: Santa Luzia Reservoir, Unhais River (Tejo basin), 10-05-2006.

Figs 1: External valve view.

Fig. 2: Internal valve view.

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

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

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

Fragilaria

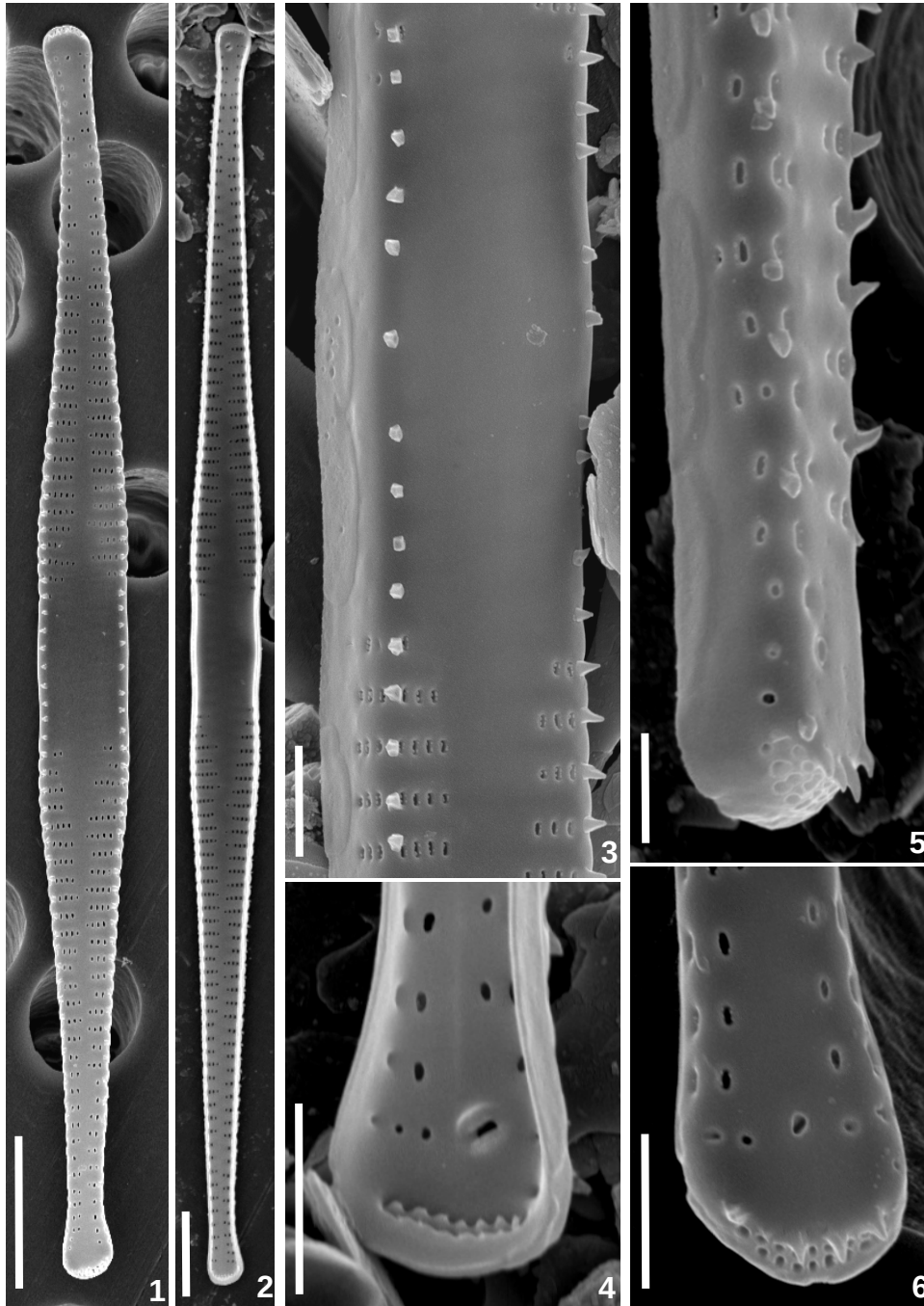


Plate 27

LM: x1500

Figs 1-17: *Fragilaria* sp.2, p. 13

Figs 18-28: *Fragilaria* sp.3, p. 13

Figs 29-42: *Fragilaria mesolepta* Rabenhorst, p. 12 [FMES]

Scale bar = 10 μm

Figs 1-17: São Pedro de Muel, São Pedro Stream (Ribeiras do Oeste basin), 10-06-2007.

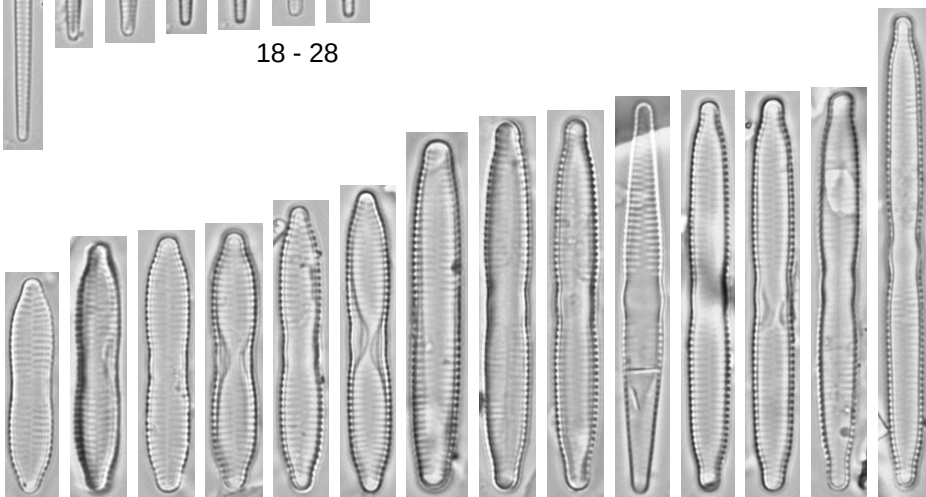
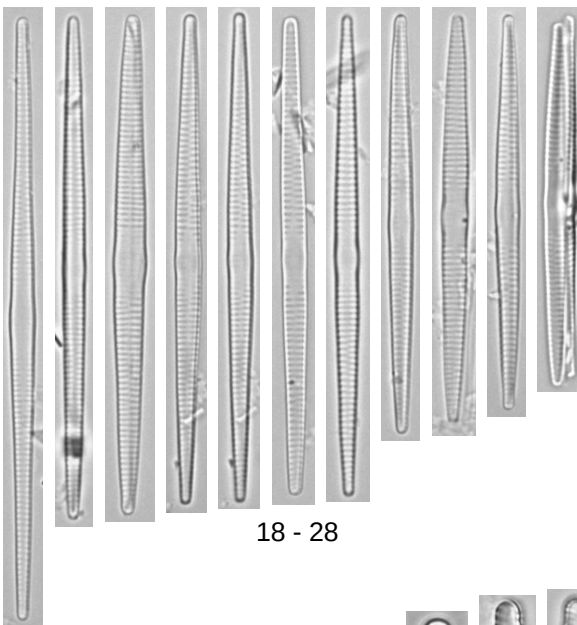
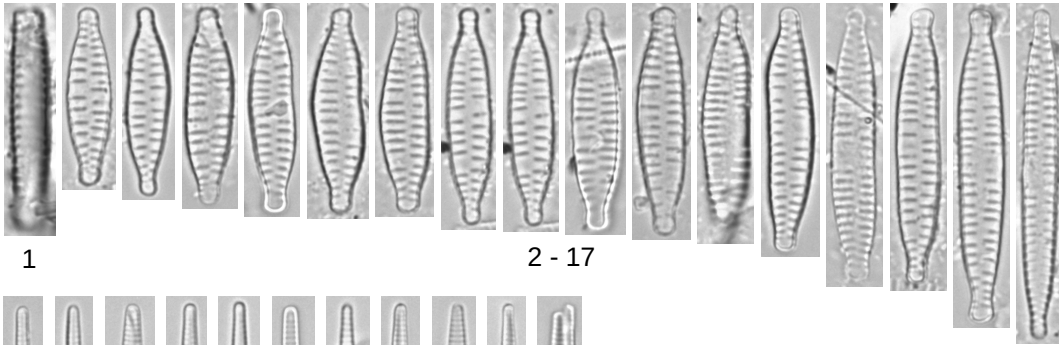
Figs 18-28: Valeira Reservoir, Douro River (Douro basin), 17-05-2006.

Figs 29-42: Meimoa Reservoir, Meimoa Stream (Tejo basin), 10-05-2006.

Figs 2-42: Valve view.

Fig. 1: Girdle view.

Fragilaria



29 - 42

Plate 28

LM: x1500

Figs 1-17, 22-33: *Fragilaria parva* Tuji & D.M. Williams, p. 12

Figs 18-21: *Fragilaria acidoclinata* Lange-Bertalot & Hofmann, p. 11 [FACD]

Figs 34-45: *Fragilaria mesolepta* Rabenhorst, p. 12 [FMES]

Scale bar = 10 μm

Figs 1-17: Alcafache, Dão River (Mondego basin), 12-05-2007.

Figs 18-21: Oleiros, Seca Stream (Ribeiras do Algarve basin), 16-04-2006.

Figs 22-33: Barbaído, Tripeiro River (Tejo basin), 11-07-2006.

Figs 34-45: Monte Novo Reservoir, Degebe River (Guadiana basin), 02-02-2006.

Figs 1-21, 23-44: Valve view.

Figs 22, 45: Girdle view.

Fragilaria

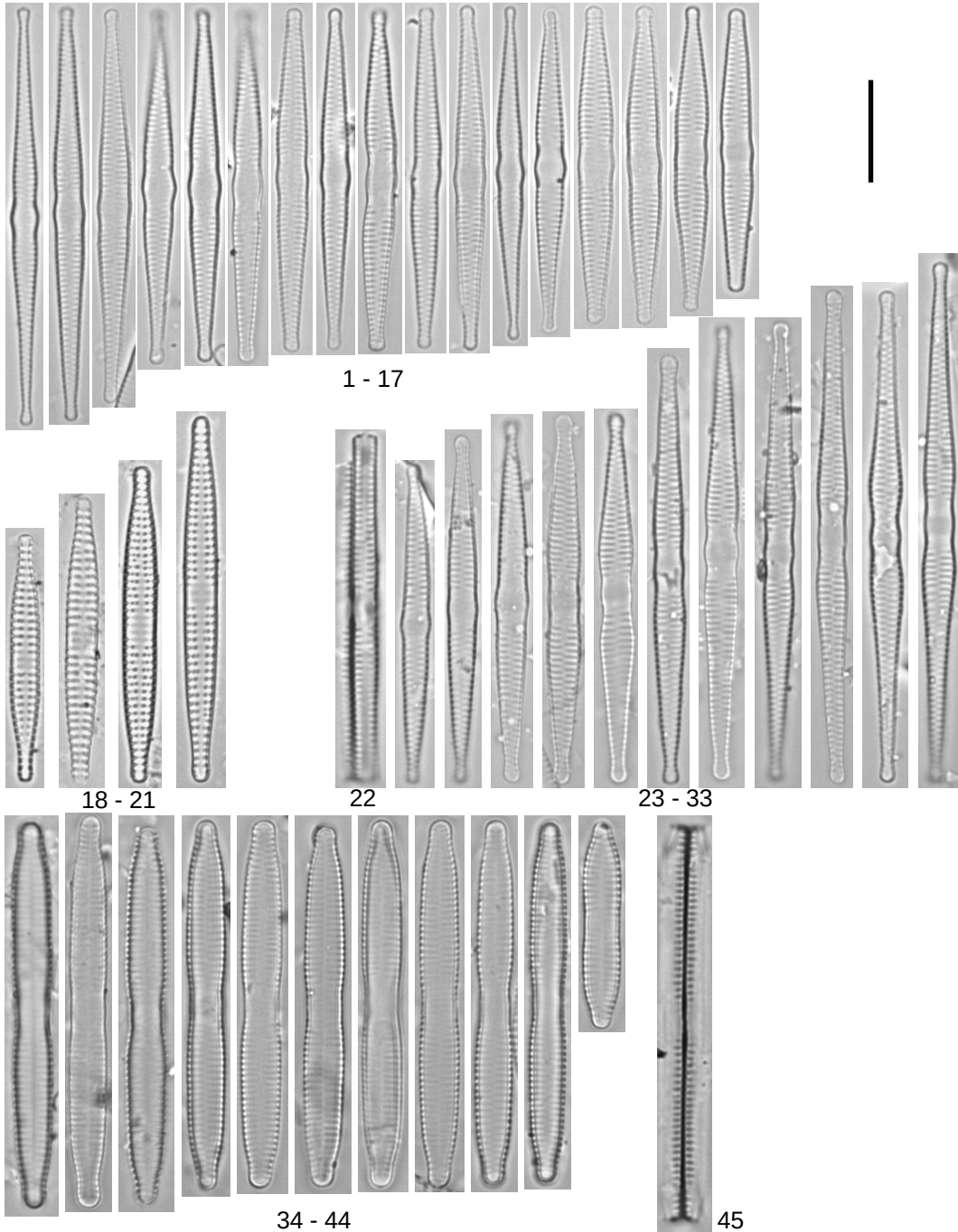


Plate 29

LM: x1500

Figs 1-26: *Fragilaria radians* (Kützing) D.M. Williams & Round, p. 12 [FRAD]

Figs 27-42: *Fragilaria vaucheriae* (Kützing) J.B. Petersen, p. 13 [FVAU]

Scale bar = 10 μm

Figs 1-13: Barranco, Vascão Stream (Guadiana basin), 24-04-2006.

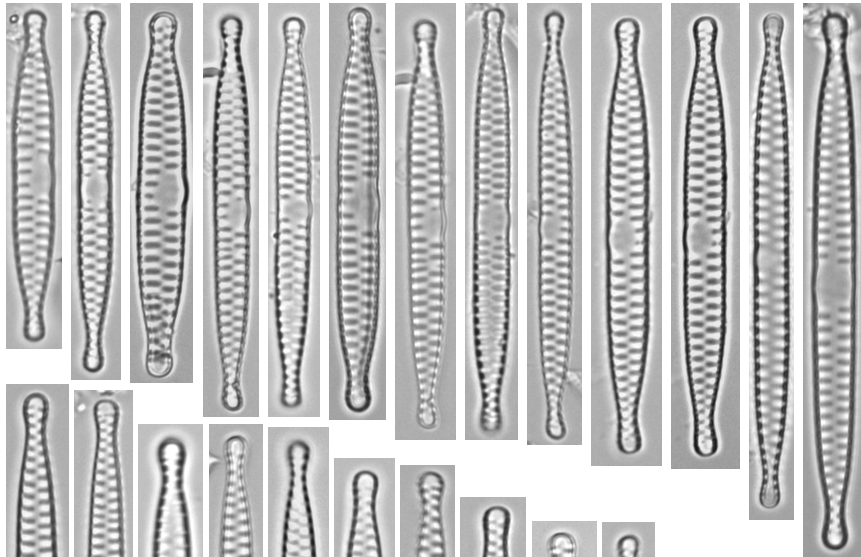
Figs 15-27: Oleiros, Seca Stream (Ribeiras do Algarve basin), 16-04-2006.

Figs 28-43: Azinhal de Mouros, Vascão Stream (Guadiana basin), 24-04-2006.

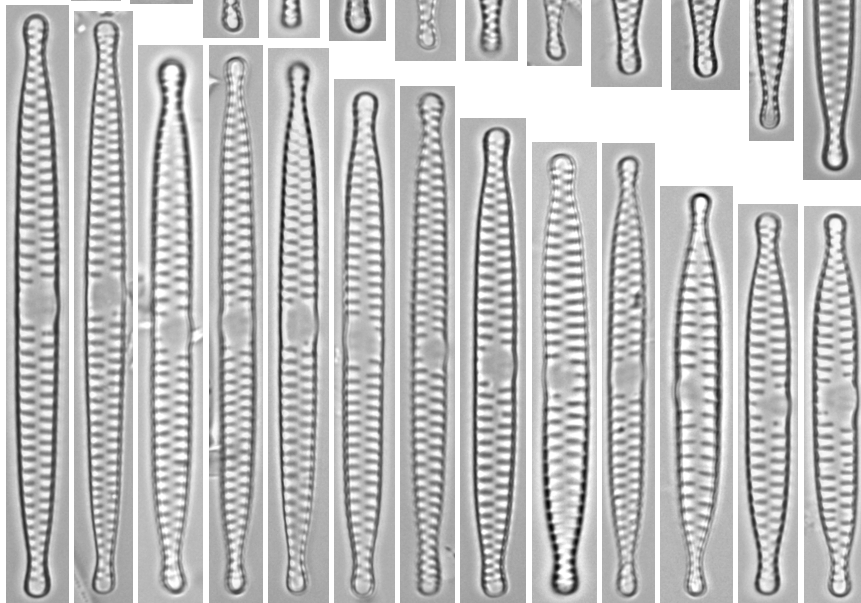
Figs 1-42: Valve view.

Fig. 43: Girdle view.

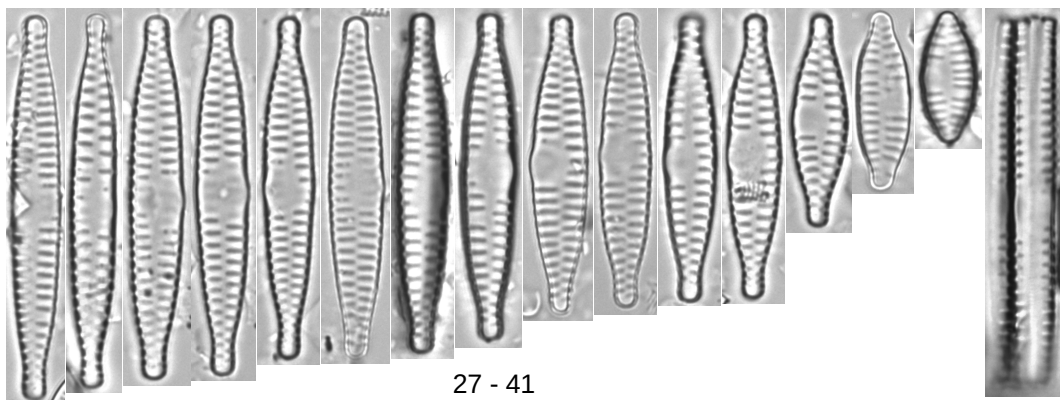
Fragilaria



1 - 13



14 - 26



27 - 41

42

Plate 30

LM: x1500

Figs 1-16: *Fragilaria* aff. *pectinalis* (O.F. Müller) Lyngbye, p. 12

Figs 17-32: *Fragilaria socia* (J.H. Wallace) Lange-Bertalot, p. 13 [FSOC]

Figs 33-63: *Fragilaria* sp.4, p. 14

Scale bar = 10 µm

Figs 1-16: Casal Rei, Zêzere River (Tejo basin), 26-06-2006.

Figs 17-32: Peramanca Stream (Sado basin), 05-04-2006.

Figs 33-48: Espargal, Algibre Stream (Ribeiras do Algarve basin), 17-04-2006.

Figs 49-63: Foz do Carvalhoso, Seixe Stream (Ribeiras do Algarve basin), 15-04-2006.

Figs 1-14, 17-26, 33-48, 51-63: Valve view.

Figs 15, 16, 27-32, 49, 50: Girdle view.

Fragilaria

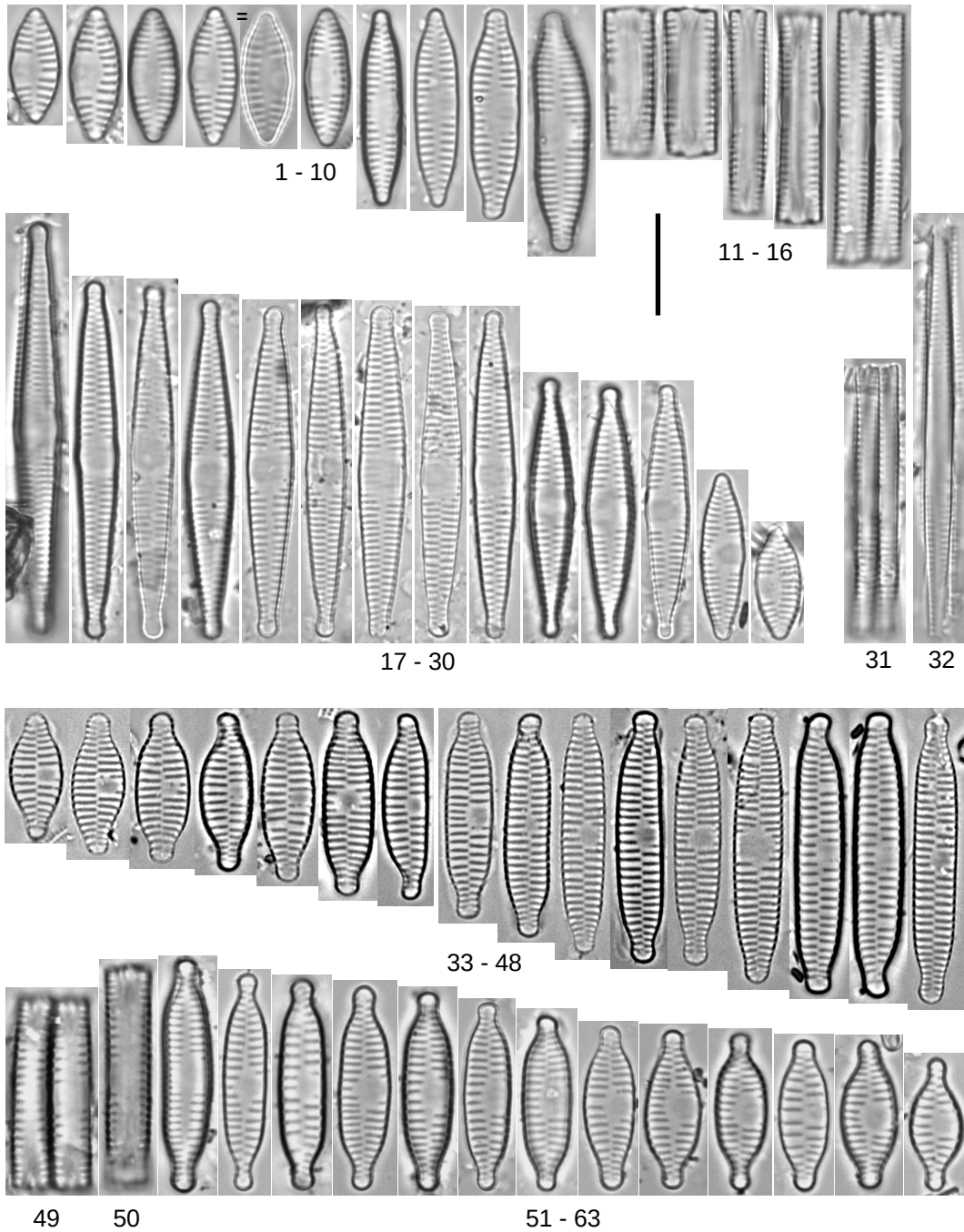


Plate 31

Figs 1-6: *Fragilaria* sp.4, p. 14

Scale bars (Figs 1-4) = 5 μm Scale bars (Figs 5, 6) = 1 μm

Figs 1-6: Foz do Carvalhoso, Seixe Stream (Ribeiras do Algarve basin), 15-04-2006.

Figs 1, 3: External valve view.

Figs 2, 4: Internal valve view.

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

Fig. 6: Detail of the apical area in internal view.

Fragilaria

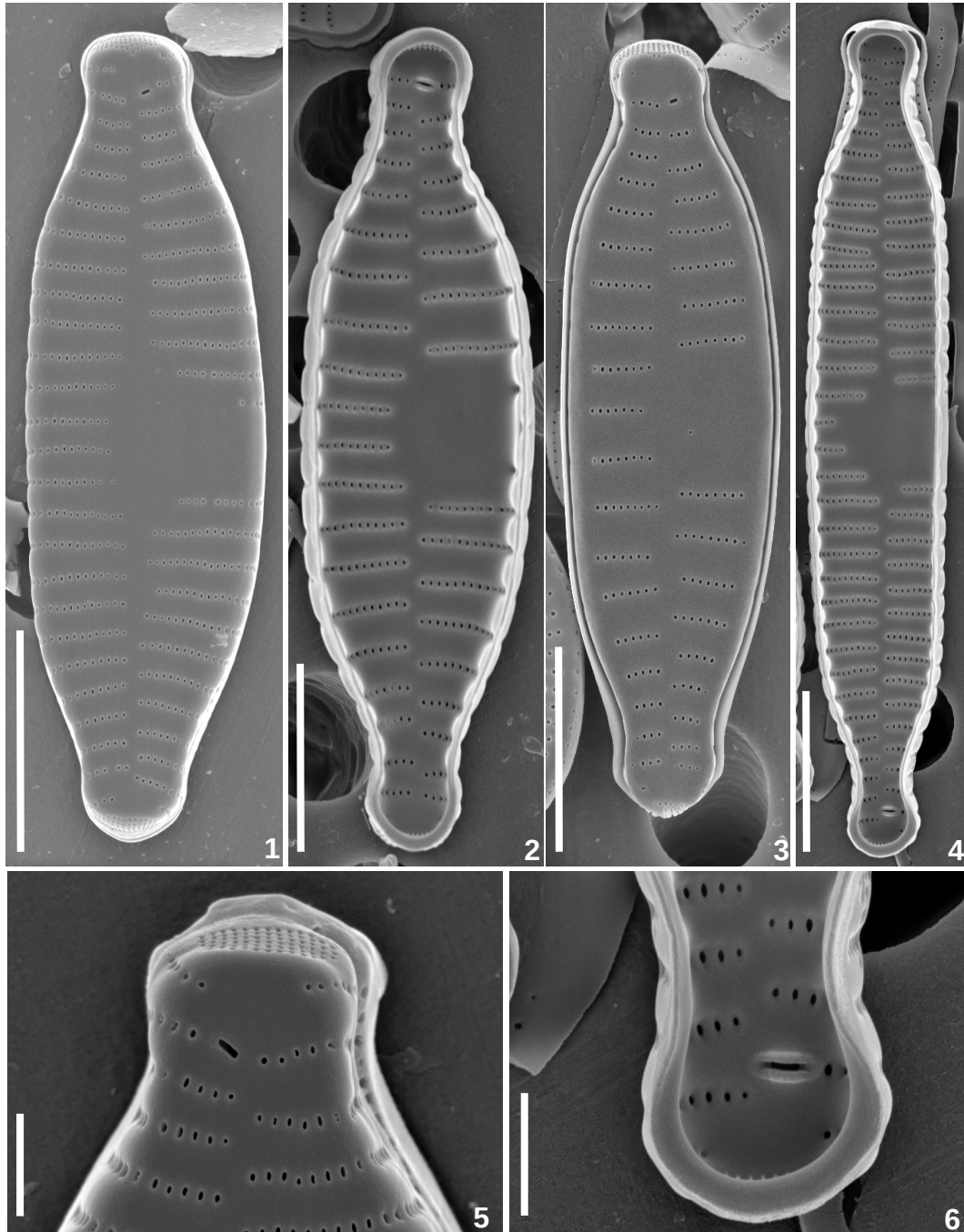


Plate 32

LM: x1500

Figs 1-30: *Fragilaria* aff. *rumpens* (Kützinger) G.W.F. Carlson, p. 13

Figs 31-67: *Fragilaria* aff. *capitellata* (Grunow) J.B. Petersen, p. 11

Scale bar = 10 μm

Figs 1-18: Redonda, Águeda River (Vouga basin), 13-05-2007.

Figs 19-30: São João do Monte, Águeda River (Vouga basin), 13-05-2007.

Figs 31-50: Pomar, Alvito Stream (Tejo basin), 11-07-2006.

Figs 51-67: Santa Luzia Reservoir, Unhais River (Tejo basin), 10-05-2006.

Figs 1-64: Valve view.

Figs 65-67: Girdle view.

Fragilaria

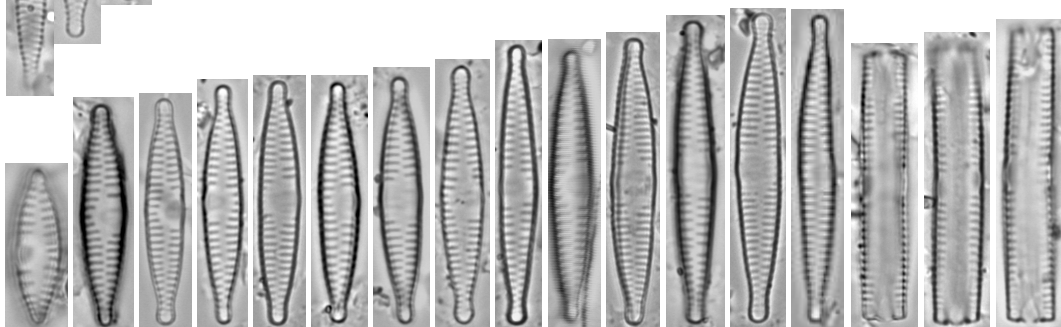
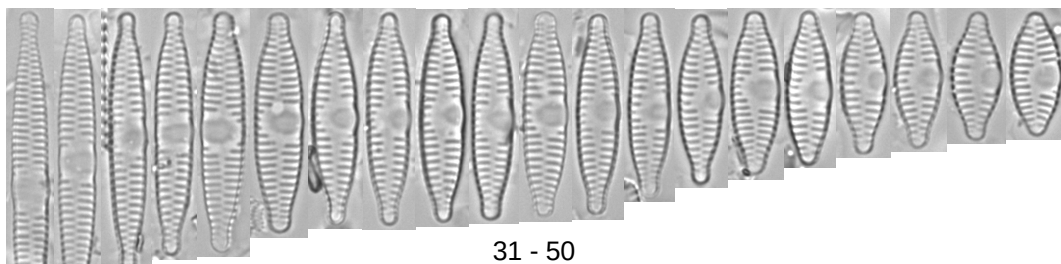
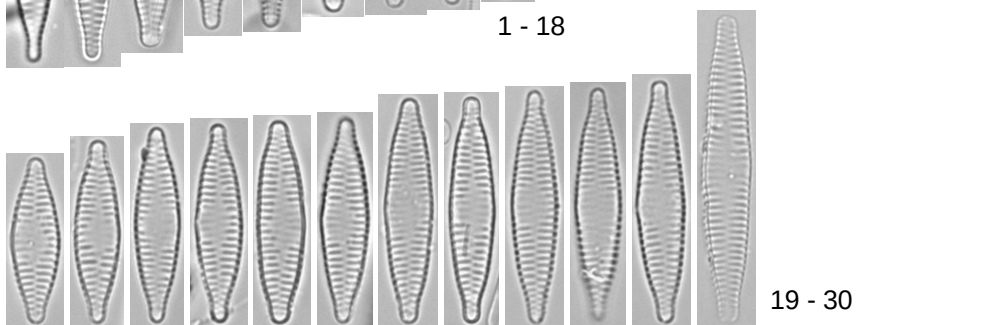
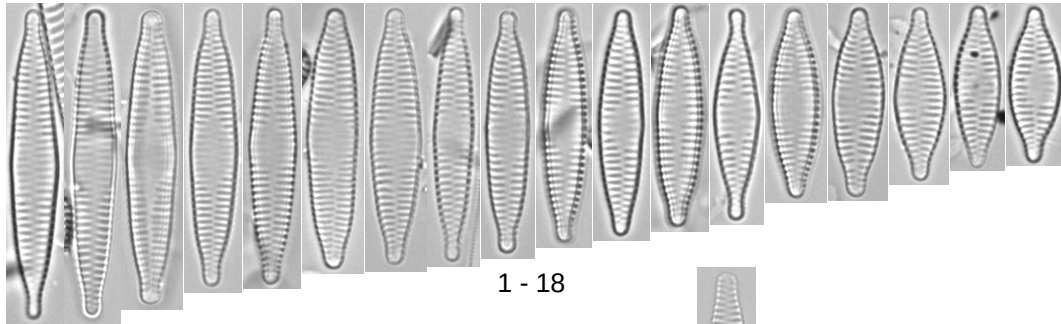


Plate 33

LM: x1500

Figs 1-33: *Fragilaria pectinalis* (O.F. Müller) Lyngbye, p. 12 [FPEC]

Figs 34-43: *Asterionella formosa* Hassall, p. 10 [AFOR]

Scale bar = 10 μm

Figs 1-16: Belver, Tejo River (Tejo basin), 06-07-2006.

Figs 17-33: Monte Novo Reservoir, Degebe River (Guadiana basin), 02-02-2006.

Figs 34-43: Fratel Reservoir, Tejo River (Tejo basin), 27-04-2006.

Figs 1-32, 34-43: Valve view.

Fig. 33, 44: Girdle view.

Fragilaria
Asterionella

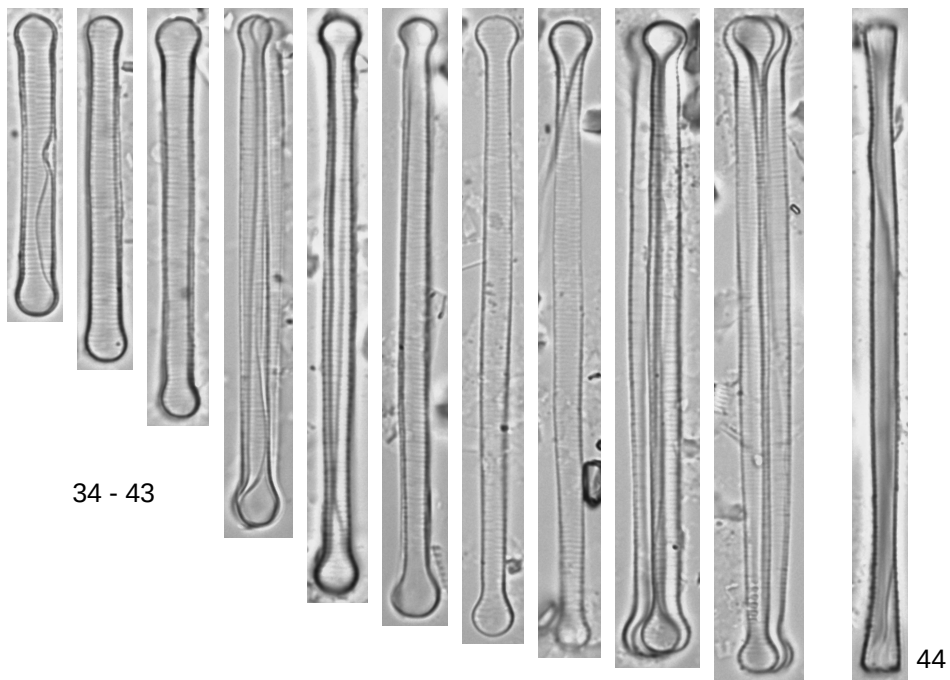
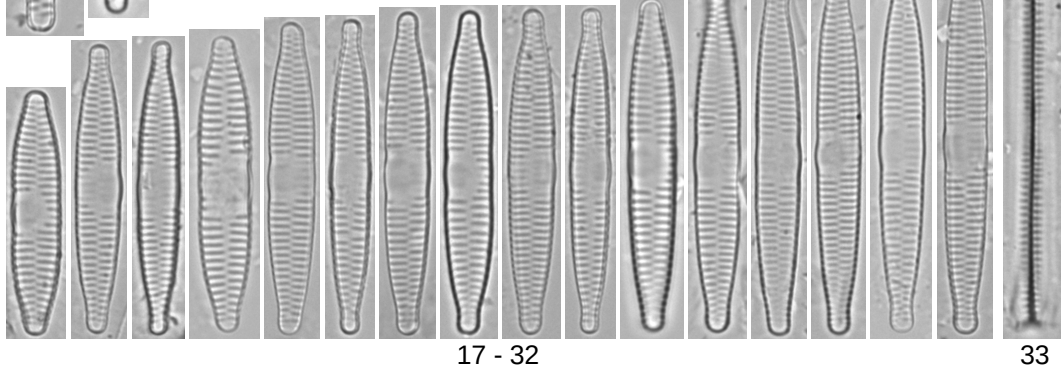
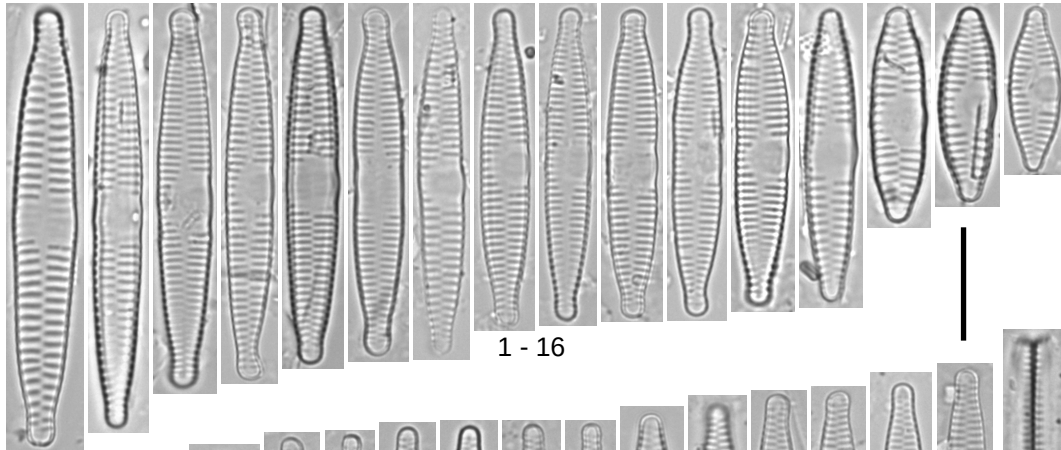


Plate 34

Figs 1, 2: *Fragilaria pectinalis* (O.F. Müller) Lyngbye, p. 12 [FPEC]

Scale bars = 5 μm

Figs 1, 2: Belver, Tejo River (Tejo basin), 06-07-2006.

Fig. 1: External valve view.

Fig. 2: Internal valve view.

Fragilaria

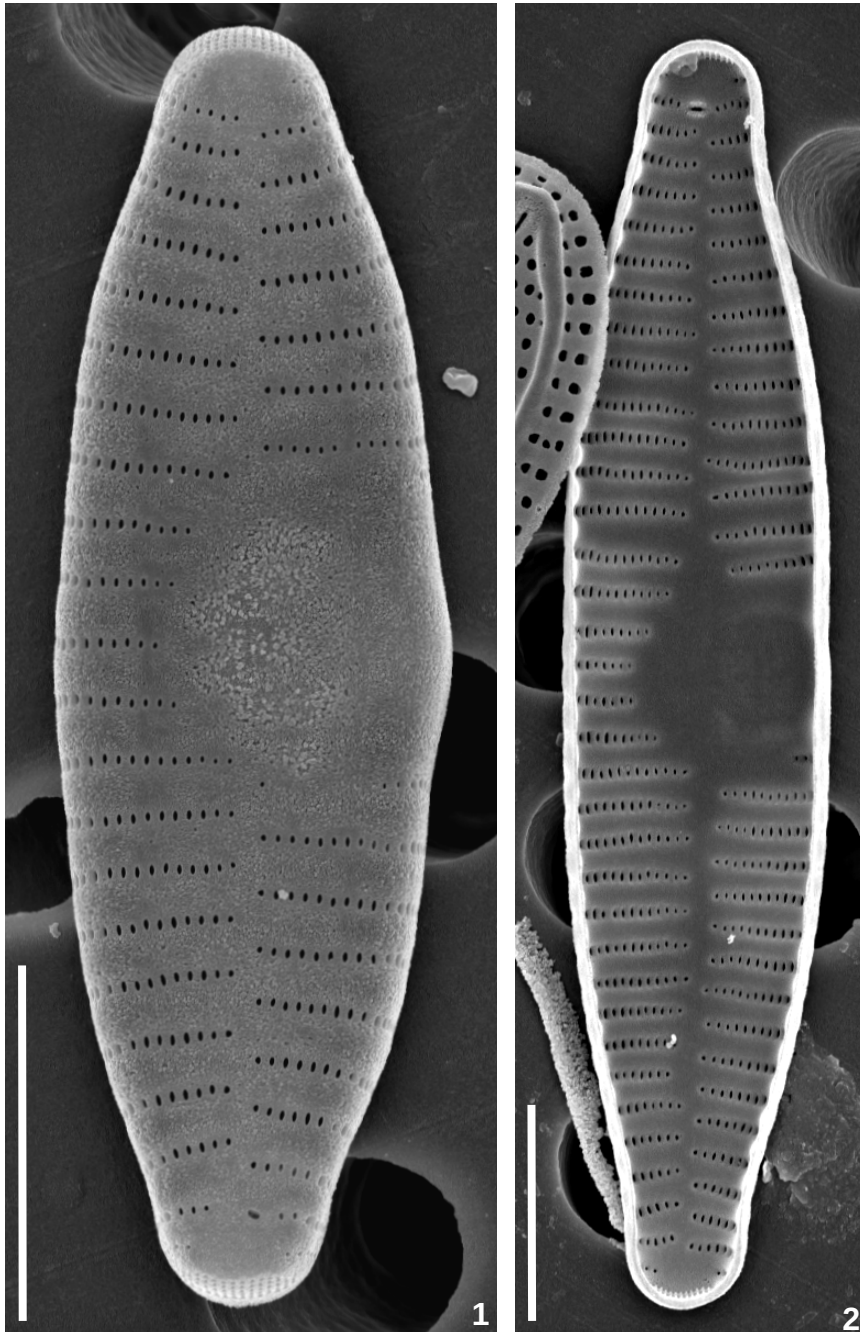


Plate 35

LM: x1500

Figs 1-70: *Pseudostaurosira alvareziae* Cejudo-Figueiras, E. Morales & Ector 2010, p. 14

Figs 71-80: *Pseudostaurosira* aff. *polonica* (Witak & Lange-Bertalot) E. Morales & Edlund 2003, p. 14

Figs 81-89: *Pseudostaurosira brevistriata* (Grunow in Van Heurck) D.M. Williams & Round 1987, p. 14 [PSBR]

Scale bar = 10 μ m

Figs 1-17: Amieira, Tejo River (Tejo basin), 06-07-2006.

Figs 18-40: Barquinha, Tejo River (Tejo basin), 06-07-2006.

Figs 41-47: Monte Novo Reservoir, Degebe River (Guadiana basin), 14-07-2006.

Figs 48-59: Fratel Reservoir, Tejo River (Tejo basin), 27-04-2006.

Figs 60-70: Fratel Reservoir, Tejo River (Tejo basin), 12-07-2006.

Figs 71-89: Saucelle, Douro River (Douro basin), 14-09-2007.

Figs 1-35, 41-45, 48-58, 60-67, 71-80, 84-89: Valve view.

Figs 36-40, 46, 47, 59, 68-70, 81-83: Girdle view.

Pseudostaurosira

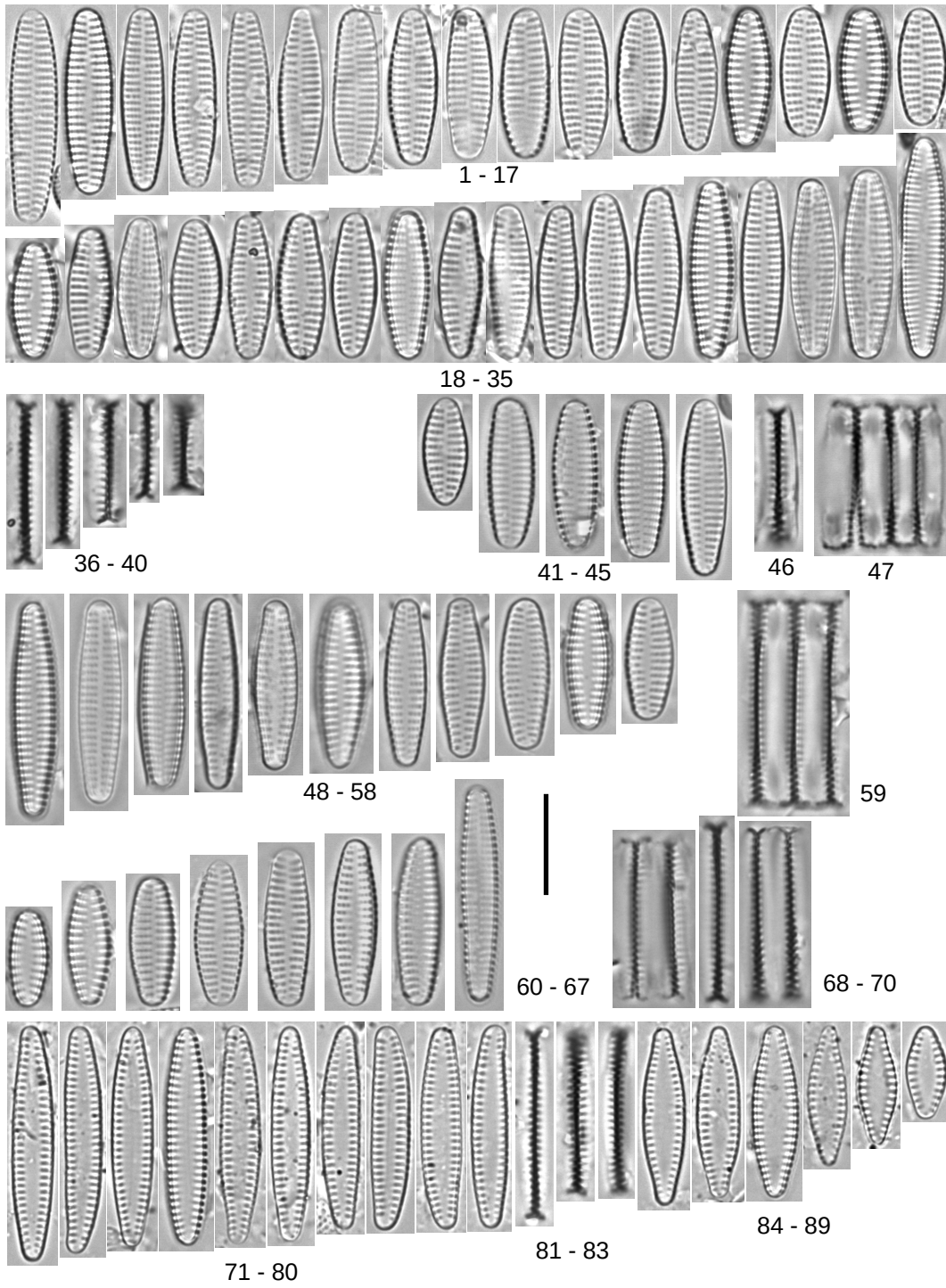


Plate 36

Figs 1-4: *Pseudostaurosira alvareziae* Cejudo-Figueiras, E. Morales & Ector
2010, p. 14

Scale bars = 1 μm

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

Figs 1, 2: External valve view.

Fig. 3: Internal valve view.

Fig. 4: Girdle view.

Pseudostaurosira

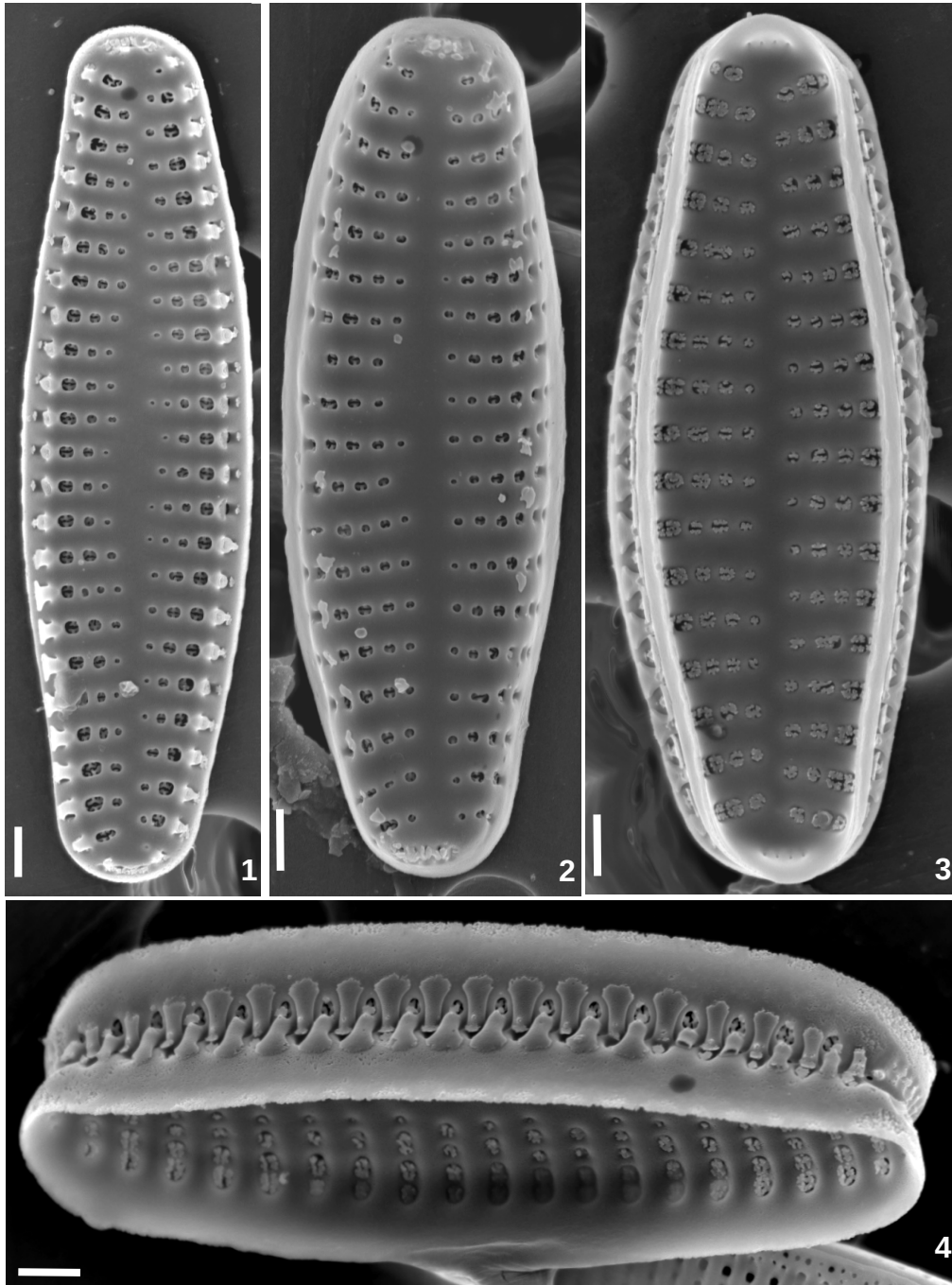


Plate 37

Figs 1-4: *Pseudostaurosira* aff. *polonica* (Witak & Lange-Bertalot) E. Morales & Edlund 2003, p. 14

Scale bars = 5 μ m

Figs 1-4: Saucelle, Douro River (Douro basin), 14-09-2007.

Figs 1, 2: External valve view.

Figs 3, 4: Internal valve view.

Pseudostaurosira

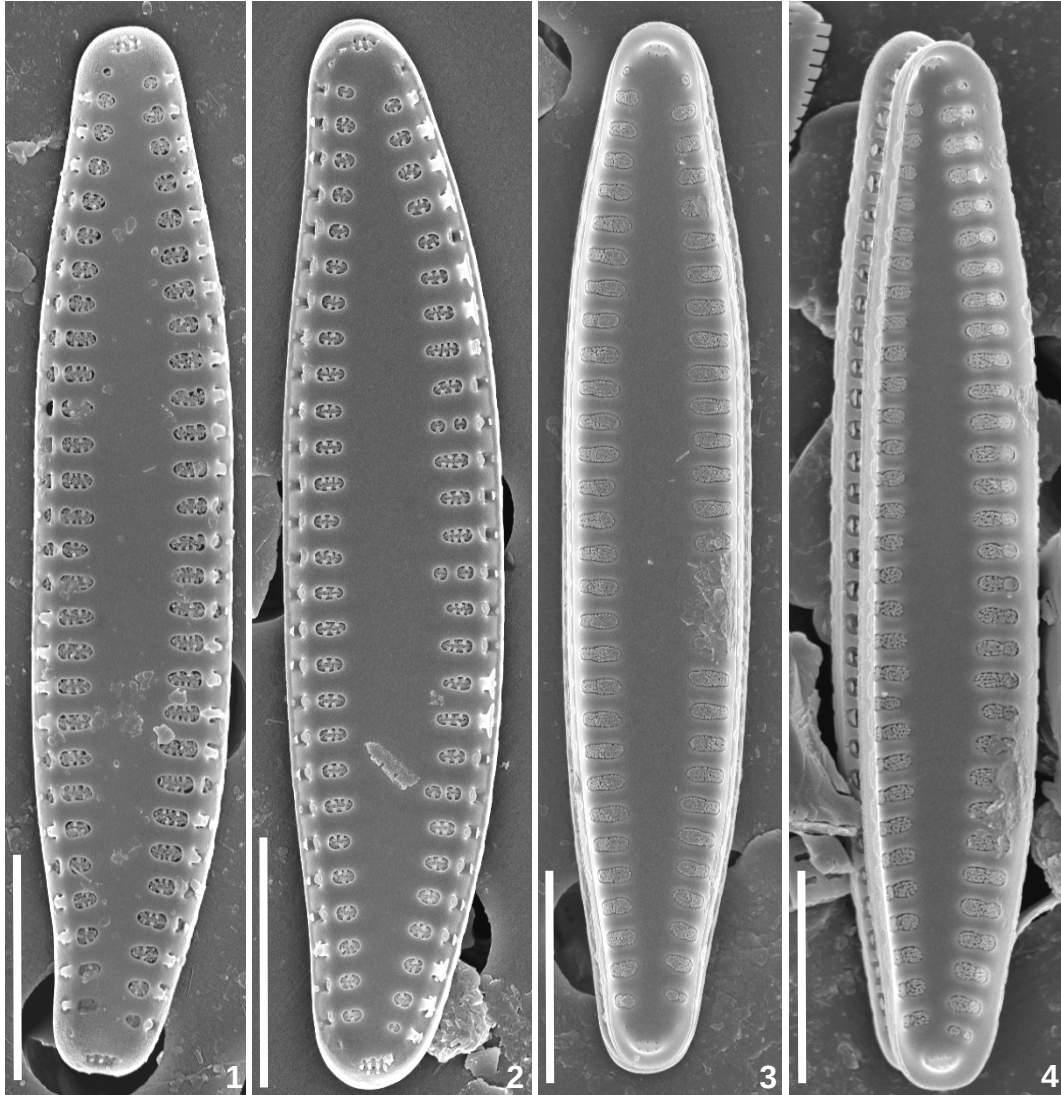


Plate 38

LM: x1500

Figs 1-35: *Pseudostaurosira brevistriata* var. *capitata* (Héribaude) N.A. Andresen, E.F. Stoermer & R.G. Kreis, Jr., p. 14 [PBCA]

Figs 36-59: *Fragilaria nitzschioides* Grunow in Van Heurck 1881, p. 12 [FNIT]

Figs 60-120: *Punctastriata* sp., p. 15 [PUCS]

Scale bar = 10 μ m

Figs 1-18: Monte dos Irmãos, Sôr Stream (Tejo basin), 29-06-2006.

Figs 19-35: Penha de Águia, Guadiana River (Guadiana basin), 18-05-2006.

Figs 36-59: Cinco Vilas, Côa River (Douro basin), 18-08-2007.

Figs 60-78: Gorazes, Oeiras Stream (Guadiana basin), 25-04-2006.

Figs 79-93: Junqueira, Maças River (Douro basin), 12-08-2007.

Figs 94-120: Poldras Stream (Douro basin), 15-09-2007.

Figs 1-17, 19-33, 36-57, 60-76, 79-120: Valve view.

Figs 18, 34, 35, 58, 59, 77, 78: Girdle view.