

289. Nitzschia obtusa (sect. Nitzschia) x 2,380
Valve, valve view - most. N.B. This species is sigmoid.
290. Nitzschia obtusa (sect. Nitzschia) x 4,350
Valve, valve view - centre; note slight deflection of raphe system towards the distal margin (and see F.289), central interruption of striae.
291. Nitzschia obtusa (sect. Nitzschia) x 4,350
Valve, valve view - pole.
292. Nitzschia obtusa (sect. Nitzschia) x 4,350
Valve, valve view - centre; note poroids.
293. Nitzschia vidovichii (sect. Nitzschia) x 2,100
Valve, valve view - part; note almost central raphe system, central deflection of raphe system.
294. Idem. x 1,400
295. Nitzschia vidovichii (sect. Nitzschia) x 3,400
Valve, valve view - pole
296. Nitzschia vidovichii (sect. Nitzschia) x 4,350
Valve, valve view - centre; note subraphe structure, poroids, wider central interspace, central interruption of striae.
297. Nitzschia filiformis (sect. Nitzschia) x 3,400
Valve, valve view; note eccentric raphe system (compare F.289, contrast F.293-4), very slight sigmoidity of valve.
298. Nitzschia filiformis (sect. Nitzschia) x 6,100
Valve, valve view - centre; note poroids, central interruption of striae.

299. Nitzschia sigma var. (sect. Nitzschia) x 3,000
Frustule, girdle view; note sigmoidity.
300. Nitzschia sigma var. (sect. Nitzschia) x 3,000
Frustule, valve view; note sigmoidity.
301. Nitzschia sigma (sect. Nitzschia) x 3,000
Valve, girdle view - pole.
302. Nitzschia sigma (sect. Nitzschia) x 3,400
Valve, valve view - part; note the two longitudinal ridges (arrows) joining the distal fibula bases.
303. Nitzschia sigma var. (sect. Nitzschia) x 3,400
Valve, valve view.
304. Idem. x 3,400
305. Nitzschia ignorata (sect. Nitzschia) x 3,400
Valve, valve view; note 'central nodule'.
306. Idem. x 3,400
307. Nitzschia ?ignorata (sect. Nitzschia) x 3,400
Valve, valve view; 'central nodule' present?

308. Nitzschia sigma (sect. Nitzschia) x 1,500
Cell, girdle view; note Bütschli globules
(arrows).
309. Nitzschia sigma (sect. Nitzschia) x 1,500
Cell, girdle view; note lobing of the chromato-
phore margin.
310. Idem. x 1,400
311. Nitzschia sigma (sect. Nitzschia) x 1,400
Cell, oblique view - showing how the plastid
lobes under the raphe system (which is repres-
ented by double lines, continuous or dashed).
312. Nitzschia sigma (sect. Nitzschia) (no scale)
Cell, transapical section.
313. Nitzschia sigma (sect. Nitzschia) (no scale)
Cell, girdle view - centre; note apically elongate
nucleus, narrow and winding cleft between chrom-
atophores.
314. Nitzschia sigma (sect. Nitzschia) x 3,400
Nucleus, girdle view - stained with aceto-
carmine; note moderate uptake of stain, granul-
arity of nucleoplasm.
315. Nitzschia sigma var. (sect. Nitzschia) (no scale)
Cell, girdle view; note Bütschli globules.
316. Nitzschia ?clausii (sect. Nitzschia) x 2,100
Cell, valve view; note short chromatophores,
prominent Bütschli globules.

317. Nitzschia sp.B (Eilat) (sect. Nitzschia) x 3,400
Valve, valve view - centre; note central raphe
endings, larger central interspace.
318. Nitzschia sp.B (Eilat) (sect. Nitzschia) x 3,400
Valve, valve view - pole; note that the raphe is
more central near the pole than elsewhere. Also,
note the helictoglossa.
319. Nitzschia ?clausii (sect. Nitzschia) x 3,400
Valve, valve view; note 'central nodule'.
320. Nitzschia sigmoidea (sect. Nitzschia) x 1,400
Cell, girdle view; note apparent absence of
Bütschli globules. Note the epiphytic Synedra
parasitica var. subconstricta (arrow)
321. Nitzschia sigmoidea (sect. Nitzschia) x 1,400
Cell, girdle view; note the two epiphytic
Amphora ovalis var. pediculus.

322. Nitzschia sigmoidea (sect. Nitzschia) x 1,050
Frustule, girdle view (joined at 'a').
323. Nitzschia vermicularis (sect. Nitzschia) x 1,050
Frustule, girdle view.
324. Nitzschia flexa (sect. Nitzschia) x 1,050
Frustule, girdle view.
325. Nitzschia vermicularis (sect. Nitzschia) x 1,400
Cell, girdle view.
326. Nitzschia vermicularis (sect. Nitzschia) (no scale)
Cell, girdle view - pole; note lobing of
chromatophore margin.

327. Nitzschia sigmoidea (sect. Nitzschia) x 3,400
Frustule, girdle view - pole; note flanges (fl)
extending out from raphe-sternum, bands with two
transverse rows of poroids each.
328. Nitzschia sigmoidea (sect. Nitzschia) x 3,400
Valve, valve view - part; note longitudinal line
(arrow): compare F.242, 244, etc.
329. Nitzschia vermicularis (sect. Nitzschia)
x 3,400
Frustule, girdle view - pole.
330. Nitzschia vermicularis (sect. Nitzschia)
x 4,350
Frustule, girdle view - part; note flanges (fl),
longitudinal line (right-hand valve), perforate
bands (apparently with two transverse rows of
poroids each).
331. Nitzschia flexa (sect. Nitzschia) x 3,400
Frustule, girdle view - pole.
332. Nitzschia flexa (sect. Nitzschia) x 3,400
Frustule, girdle view - pole; note striae.

333. Nitzschia sigmoidea (sect. Nitzschia) x 1,400
Cell, * in valve view - half; note presence of
many cells of Amphora ovalis var. pediculus.
334. Nitzschia sigmoidea (sect. Nitzschia) x 1,400
Cell, girdle view - half; note epiphytic Synedra
parasitica var. parasitica.
335. Nitzschia sigmoidea (sect. Nitzschia) x 1,400
Cell, girdle view - pole; note occurrence
together of Amphora ovalis var. pediculus and
Synedra parasitica var. subconstricta .
336. Cylindrotheca gracilis x 1,400
Cell; note the small, almost discoid chromato-
phores.
337. Nitzschia acicularis (sect. Nitzschiella)
x 1,400
Cell, valve view.

539. Nitzschia sigma var. (sect. Nitzschia) x 60,000
Valve poroids.
540. Nitzschia linearis (sect. Lineares) x 60,000
Valve poroids.
541. Nitzschia spathulata (sect. Spathulatae) x 60,000
Valve poroids.
542. Nitzschia spathulata (sect. Spathulatae) x 60,000
Valve poroids; contrast F.541!
543. Nitzschia sigma (sect. Nitzschia) x 60,000
Valve poroid; note cribrum - contrast F.539.
544. Nitzschia ignorata (sect. Nitzschia) x 60,000
Valve poroids. The group of six poroids at the left is within the subraphe canal; the remainder belong to the valve face.

545. Nitzschia sp.B (Eilat) (sect. Nitzschia)
x 60,000
Valve poroids.
546. Nitzschia sp. (sect.?)
(Eilat material)
Valve poroids.
547. Nitzschia sp. (sect.?)
(Eilat material)
Valve poroids.
548. Nitzschia sp.B (Eilat) (sect. Nitzschia)
x 60,000
Valve poroids.
549. Nitzschia seriata (sect. Pseudonitzschia)
x 60,000
Valve poroids.
550. Nitzschia pseudodelicatissima (sect. Pseudonitzschia)
x 60,000
Valve poroids; note cribra.

830. Nitzschia spathulata (sect. Spathulatae)
(third group) x 6,700
Valve, inside - part.
831. Nitzschia spathulata (sect. Spathulatae)
(third group) x 13,100
Detail of valve illustrated in F.830; note
fibula morphology.
832. Nitzschia sigmoidea (sect. Nitzschia) x 7,100
Valve - part. Arrow indicates margin of the
external flap.
833. Nitzschia sigmoidea (sect. Nitzschia) x 7,200
Valve pole - inside; note helictoglossa, visib-
ility of poroids near pole.
834. Nitzschia sigmoidea (sect. Nitzschia) x 8,500
Valve pole - outside.
835. Nitzschia sigmoidea (sect. Nitzschia) x 14,200
Valve pole - outside; note terminal fissure
extending (almost?) to valve margin.

836. Nitzschia sigmoidea (sect. Nitzschia) x 6,800
Fracture section; note that valve is acutely angled at raphe.
837. Nitzschia sigmoidea (sect. Nitzschia) x 16,200
Valve, inside - part; note poroids opening into interspace.
838. Nitzschia sigmoidea (sect. Nitzschia) x 14,000
Fracture section - part; note external flaps, perforate walls of subraphe canal, flanges bordering raphe fissure.
839. Nitzschia sigmoidea (sect. Nitzschia) x 7,200
Valve, inside - part; note fibula morphology - formation of portulae at 2 levels.
840. Nitzschia sigma (sect. Nitzschia) x 850
Frustule - girdle view.
841. Nitzschia sigma (sect. Nitzschia) x 13,800
Valve pole - outside; note that the terminal fissure continues to near the valve margin.

842. Nitzschia sigma (sect. Nitzschia) x 8,500
Frustule - pole; note absence of poroids from
bands, open ends of bands 1 and 3.
843. Nitzschia sigma (sect. Nitzschia) x 7,900
Valve pole - inside.
844. Nitzschia sigma (sect. Nitzschia) x 7,500
Valve face - outside; raphe position indicated
by arrow.
845. Nitzschia sigma (sect. Nitzschia) x 15,500
Broken valve - part, inside (damaged negative).
846. Nitzschia sigma (sect. Nitzschia) x 14,500
Valve, inside - part; note formation of portulae
at 2 levels.
847. Nitzschia sigma (sect. Nitzschia) x 24,000
(TEM)
Poroids; note cribra (these can just be made out
in N.845).

848. Nitzschia sigma var. (sect. Nitzschia) x 14,100
Valve, outside - part; raphe at top right.
849. Nitzschia sigma var. (sect. Nitzschia) x 14,600
Valve pole - inside.
850. Nitzschia sigma var. (sect. Nitzschia) x 16,000
Valve, inside - part; note fibula morphology.
851. Nitzschia sigma var. (sect. Nitzschia) x 14,200
Valve pole - outside; note that terminal fissure continues almost to valve margin. Also (and see f. 848), note poroids in walls of subraphe canal.
852. Nitzschia sp.B (Eilat) (sect. Nitzschia)
x 7,600
Valve, inside - centre; note larger central inter-space, raphe endings, fibula morphology.
853. Nitzschia sp.B (Eilat) (sect. Nitzschia)
x 17,500
Valve, inside - part.

854. Nitzschia sp.B (Eilat) (sect. Nitzschia) x 7,900
Valve, outside - centre.
355. Nitzschia sp.B (Eilat) (sect. Nitzschia) x 8,200
Valve pole - outside.
356. Nitzschia ?clausii (sect. Nitzschia) x 13,300
Valve, outside - part; note difference in fret size across valve.
357. Nitzschia ?clausii (sect. Nitzschia) x 13,300
Valve, inside - centre; note raphe endings, longitudinal ridge joining distal fibula bases, poroids in wall of subraphe canal (see central interspace), fibula morphology.
358. Nitzschia ?clausii (sect. Nitzschia) x ?
External raphe endings at centre.
859. Nitzschia ?clausii (sect. Nitzschia) x 13,300
Valve pole - outside; note marginal ridge.
860. Nitzschia ?clausii (sect. Nitzschia) x 13,300
Valve pole - inside.

861. Nitzschia obtusa (sect. Nitzschia) x 1,280
Valve - inside.
862. Nitzschia obtusa (sect. Nitzschia) x 13,000
Valve pole - inside; note position of helictoglossa.
863. Nitzschia obtusa (sect. Nitzschia) x 6,000
Valve, inside - centre; note deflection of raphe system, larger central interspace.
864. Nitzschia obtusa (sect. Nitzschia) x 24,000
Valve pole - outside; compare with F.863.
865. Nitzschia obtusa (sect. Nitzschia) x 23,000
Valve, outside - centre; note central fissures.
866. Nitzschia obtusa (sect. Nitzschia) x 24,000
Valve, inside - part; note fibula morphology.

867. Nitzschia obtusa var. scalpelliformis (sect. Nitzschia)
x 14,500
Valve, inside - part; note fibula morphology.
868. Nitzschia obtusa var. scalpelliformis (sect. Nitzschia)
x 14,500
Valve pole - outside.
869. Nitzschia obtusa var. scalpelliformis (sect. Nitzschia)
x 13,300
Valve, outside - part.
870. Nitzschia obtusa var. scalpelliformis (sect. Nitzschia)
x 30,000
Internal central raphe endings; note 'double
helictoglossa', central expansion of the raphe-
sternum.
871. Nitzschia obtusa var. scalpelliformis (sect. Nitzschia)
x 11,000
Valve, inside - centre.
872. Nitzschia obtusa var. scalpelliformis (sect. Nitzschia)
x 13,500
Valve pole - inside; note position of helicto-
glossa.

873. Nitzschia vidovichii (sect. Nitzschia) x 13,500
Valve + 1st band (arrow indicates junction of valve with band; note single row of poroids on band. Also, note how valve costae continue without constriction/bend right up to raphe-sternum.
874. Nitzschia vidovichii (sect. Nitzschia) x 13,200
Valve pole - outside.
875. Nitzschia vidovichii (sect. Nitzschia) x 13,700
Valve, outside - centre.
876. Nitzschia vidovichii (sect. Nitzschia) x 6,500
Valve + 1st band - pole, inside; note entire margin of 1st band's pars interior (arrow), helictoglossa.
877. Nitzschia vidovichii (sect. Nitzschia) x 12,700
Broken valve - inside, part; note frets, poroids in walls of subraphe canal.
878. Nitzschia vidovichii (sect. Nitzschia) x 6,500
Valve, inside - part; note fibula morphology.

879. Nitzschia filiformis (sect. Nitzschia) x 2,650
Valve, inside; note that valve is sigmoid. Also,
note central deflection of raphe system.
880. Nitzschia filiformis (sect. Nitzschia) x 13,600
Valve, inside - centre.
881. Nitzschia filiformis (sect. Nitzschia) x 12,400
Valve outside - centre; note the 2 rows of grooves,
one on each side of the raphe.
882. Nitzschia filiformis (sect. Nitzschia) x 12,800
Valve pole - outside.
883. Nitzschia filiformis (sect. Nitzschia) x 23,300
Fracture section - part; note hymena (arrows) at
inner ends of poroids.
884. Nitzschia filiformis (sect. Nitzschia) x 13,200
Valve pole - inside; note position of helictoglossa.
885. Nitzschia ignorata (sect. Nitzschia) x 15,000
(TEM)
Valve - centre; note central fissures, 2 poroids
inside subraphe canal opposite each transapical
stria.