

Zeitschrift: Eclogae Geologicae Helvetiae
Herausgeber: Schweizerische Geologische Gesellschaft
Band: 87 (1994)
Heft: 1

Artikel: Depositional trends in the Valdorbia Section (central Italy) during the Early Jurassic, as revealed by micropaleontology, sedimentology and geochemistry
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Anhang: Plates
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DOI: <https://doi.org/10.5169/seals-167447>

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Plate 1

- Fig. 1. Wackestone with large calcareous sponge spicules and *Lingulonodosaria* cf. *ovalis*. Sample VD 514 (Carixian). $\times 80$.
- Fig. 2. Wackestone with large recrystallized echinoid remains and *Paralingulina* cf. *pupiformis* (axial lateral view). S. VD 510 (Carixian). $\times 95$.
- Fig. 3. Echinoid remains and calcareous sponge spicules. Same sample. $\times 10$.
- Fig. 4. High-spired sculptured gastropods. S. VD 499 (Carixian). $\times 95$.
- Fig. 5. Finely agglutinated *Ammodiscidae* (*Usbekistaniinae*?) with a calcitic cement. S. VD 530 (Carixian). $\times 85$.
- Fig. 6. *Planiinvoluta* aff. *P. carinata* Leischner. S. VD 525 (Carixian). $\times 85$.
- Fig. 7. *Verneulinidae*. S. VD 511 (Carixian). $\times 90$.
- Fig. 8. *Miliolidae* (*Quinqueloculina*). S. VD 519 (Carixian). $\times 105$.
- Fig. 9. *Planiinvoluta* aff. *P. carinata*. S. VD 521 (Carixian). $\times 85$.
- Fig. 10. *Agerina martana*. S. VD 511 (Carixian). $\times 100$.
- Fig. 11. *Ophthalmidium* sp.. S. VD 521 (Carixian). $\times 85$.
- Fig. 12. *Paralingulina tenera tenera* (transverse section). S. VD 527 (Carixian). $\times 70$.
- Fig. 13 and 14. *Paralingulina* cf. *pupiformis* (lateral and frontal sections). S. VD 511 (Carixian). $\times 85$.
- Fig. 15. Thick ostracod carapace (transverse section). S. VD 495 (Lower Domerian). $\times 45$.
- Fig. 16. *Icthyolaridae*. S. VD 491 (Middle Domerian). $\times 70$.
- Fig. 17. *Repmanina charoides corona* (siliceous test). S. 492 (Middle Domerian). $\times 105$.
- Fig. 18. *Ammodiscus* cf. *siliceous* (siliceous test). S. VD 493 (Middle Domerian). $\times 80$.
- Fig. 19. Mudstone-wackestone yielding ammonite nuclei, small gastropods and echinoid remains. S. VD 498 (Carixian/Domerian transition). $\times 10$.
- Fig. 20. Bioturbated mudstone, wackestone with ostracods, lenticulinas and echinoderm remains. S. VD 494.4 (Lower/Middle Domerian). $\times 10$.

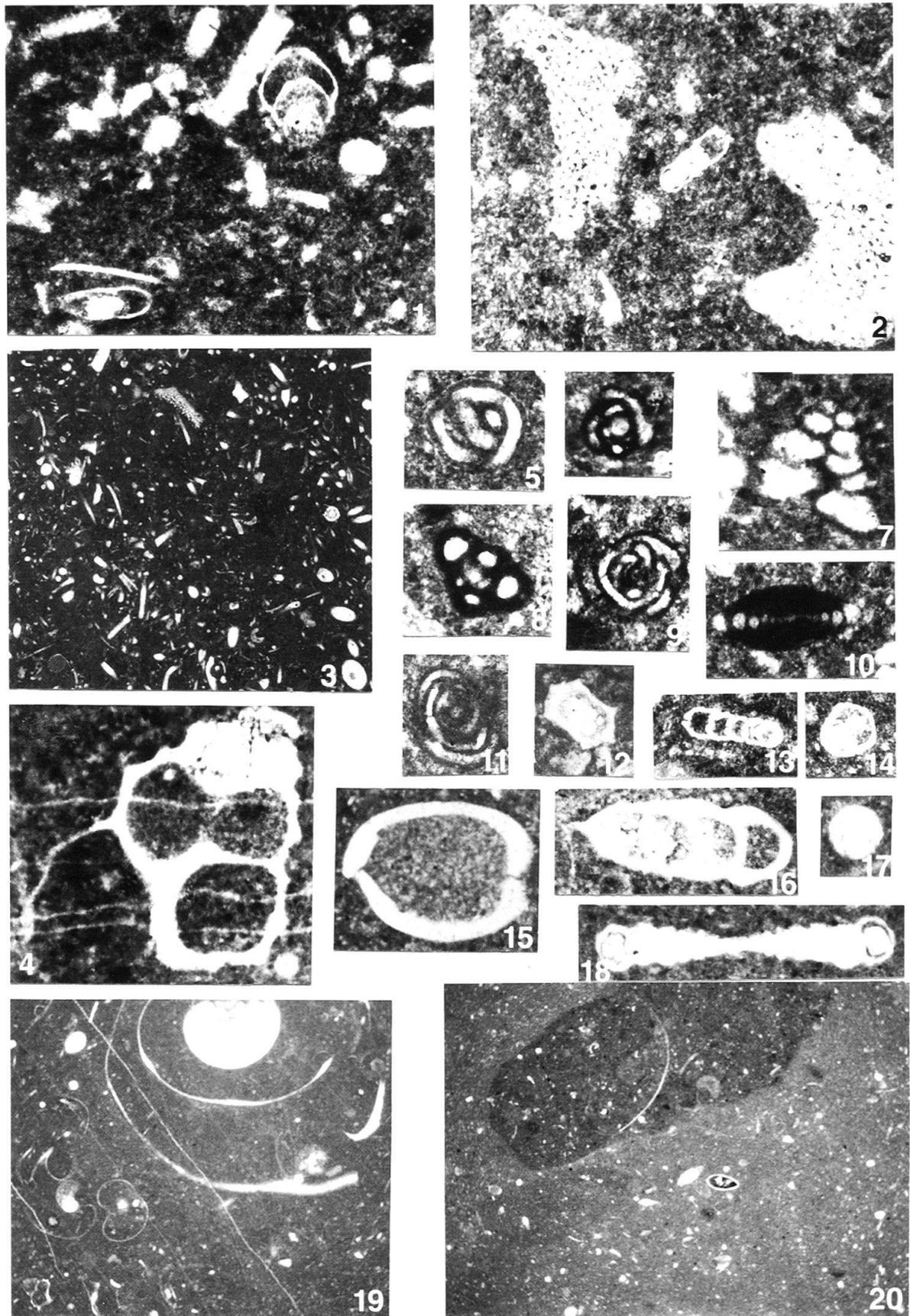


Plate 1: Microfacies 1 (Fig. 1, 2, 3, 5-14) and 2 (Fig. 4, 15-20).

Plate 2

- Fig. 1. Planar-bedded and densely packed echinoderm and peloidal calcarenite. Sample VD 399 (Lower Toarcian). $\times 25$.
- Fig. 2. Fine-grained packstone. S. VD 399.6 (Lower Toarcian). $\times 25$.
- Fig. 3. Grainstone with coated grains and *Planiinvoluta* (?). S. VD 389 (Lower Toarcian). $\times 35$.
- Fig. 4. Grainstone with coated grains and fecal pellets. S. VD 375,1 (Lower Toarcian). $\times 35$.
- Fig. 5. Recrystallized bioclastic packstone containing large lituolidae and echinoid fragments. S. VD 389 (Lower Toarcian). $\times 30$.
- Fig. 6. Green alga bioclast. Same sample. $\times 25$.
- Fig. 7. Ataxophragmiidae, *Planiinvoluta* (?) and other bioclasts. Same sample. $\times 30$.
- Fig. 8. Graded wackestone-packstone with radiolarians and flat, thin bivalves. S. VD 378,8 (Lower Toarcian). $\times 20$.
- Fig. 9. Grainstone containing ooids, peloids and skeletal fragments. S. VD 389 (Lower Toarcian). $\times 35$.
- Fig. 10. Calcified radiolarians and pyritized grains. S. VD 363 (Lower Toarcian). $\times 115$.
- Fig. 11 and 12. *Planiinvoluta* sp. S. VD 375,10 (Lower Toarcian). $\times 70$.
- Fig. 13. *Planiinvoluta* sp. (attached side of the right). S. VD 387 (Lower Toarcian). $\times 100$.
- Fig. 14. Radiolarian packstone. S. VD 368 (Lower Toarcian). $\times 25$.

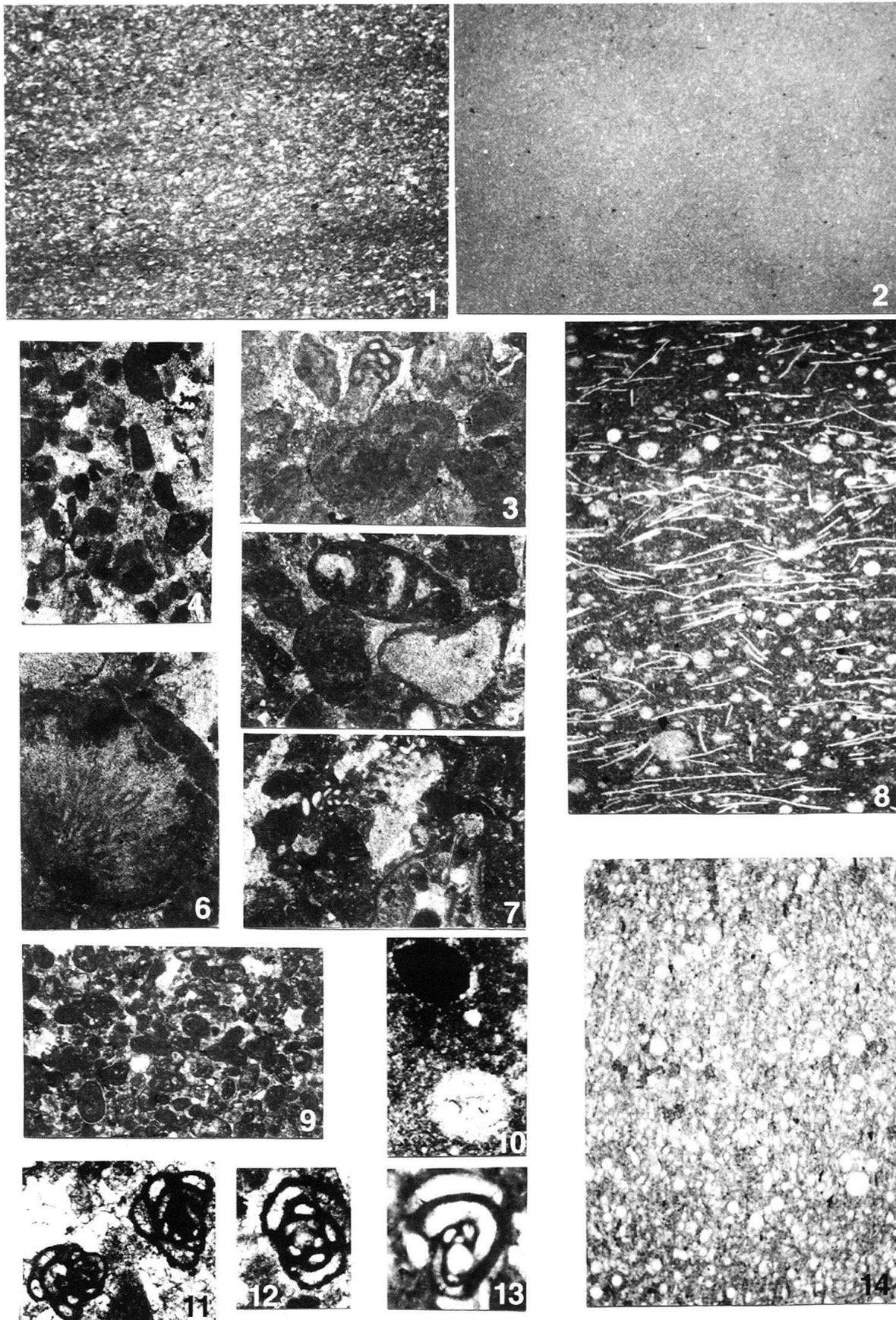


Plate 2: Microfacies 3 (Fig. 1 and 2), 4 (Fig. 3-9, 11-13) and 5 (Fig. 10 and 14).

Plate 3

- Fig. 1. Bivalve and peloidal packstone. Sample VD 189 (Middle Toarcian). × 80.
- Fig. 2. *Planiinvoluta* aff. *P. carinata*. S. VD 204 (Lower Toarcian). × 85.
- Fig. 3. *Planiinvoluta* (?). S. VD 180 (Upper Toarcian). × 85.
- Fig. 4. Peloidal grainstone with *Earlandia* sp. S. VD 189 (Middle Toarcian). × 100.
- Fig. 5 and 6. Wackestone-packstone containing bivalve shells, small gastropods, echinoderm remains and ammonite nuclei. Geopetal fabrics (shelter porosity) are common below convexly embedded shells. S. VD 177 (Upper Toarcian). × 15.
- Fig. 7, 8 and 9. Wackestone-packstone similar to the sample VD 177. Radiolarians are common. S. VD 178 (Upper Toarcian). × 15.
- Fig. 10. Bivalve packstone containing large (1 to 3 cm) intraclast with radiolarian and bivalve remains. S. VD 174,5 (Aalenian). × 10.
- Fig. 11. Densely packed flat bivalve deposits. S. VD 161,5 (Aalenian). × 10.

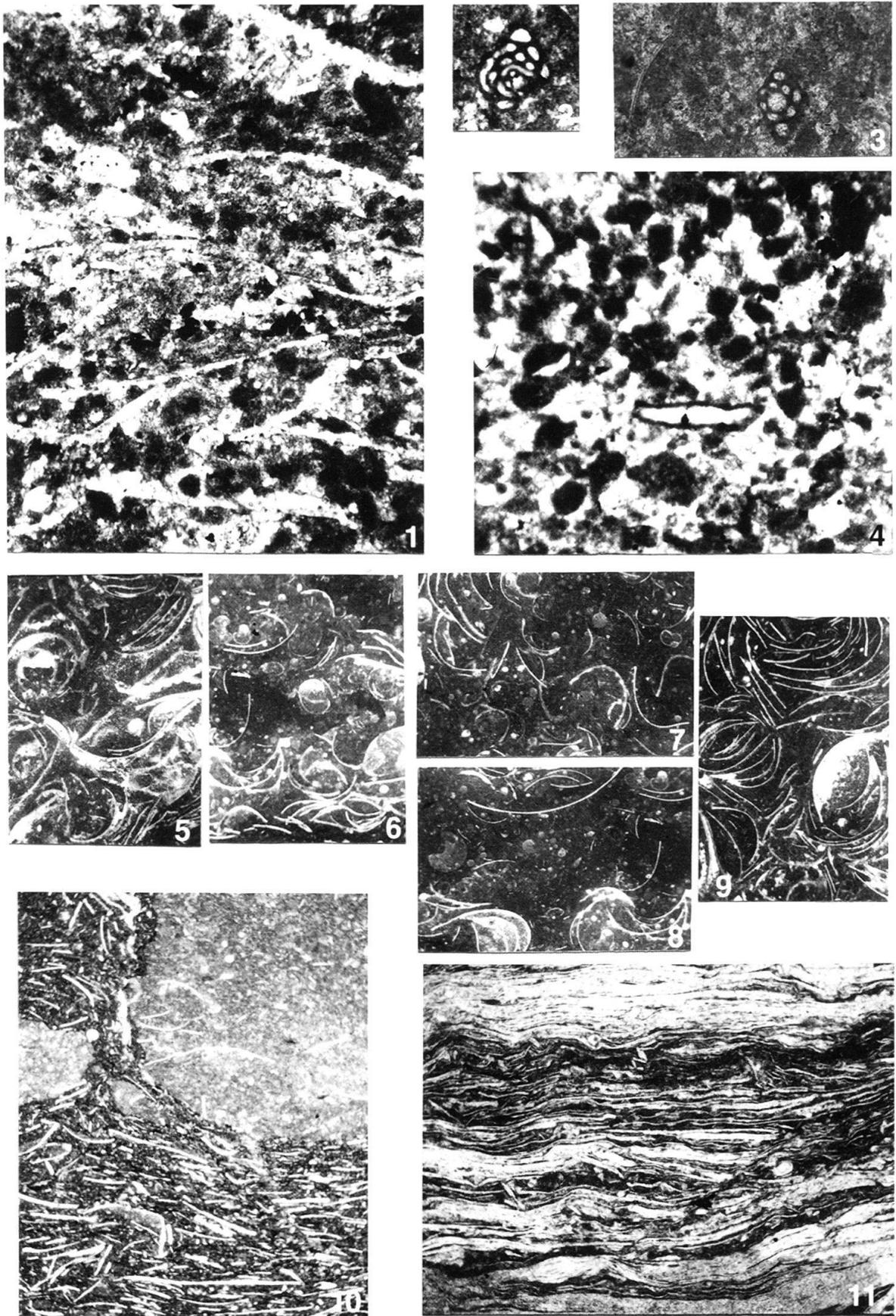


Plate 3: Microfacies 6 (Fig. 1, 3 and 4), 8 (Fig. 5-9) and 9 (Fig. 10 and 11).

Plate 4

- Fig. 1. *Jaculella liasica*. Sample VD 496.18 (Lower Domerian). $\times 111$.
- Fig. 2. *Repmania charoides corona*. S. VD 498 (Carixian/Domerian transition). $\times 200$.
- Fig. 3. *Glomospira variabilis*. S. VD 496.18 (Lower Domerian). $\times 121$.
- Fig. 4. *Jaculella anulata* (side view). S. VD 488.9 (Upper Domerian). $\times 64$.
- Fig. 5. Same specimen (oblique apertural view).
- Fig. 6. *Glomospirella gaultina*. S. VD 496.18 (Lower Domerian). $\times 127$.
- Fig. 7. *Glomospirella* sp. 1. S. VD 488.9 (Upper Domerian). $\times 121$.
- Fig. 8. *Prodentalina* cf. *constricta* (side view). S. VD 373 (Lower Toarcian). $\times 140$.
- Fig. 9. Same specimen (apertural view).
- Fig. 10. *Paralingulina tenera praepupa* (oblique apertural view). S. VD 373 (Lower Toarcian).
- Fig. 11. Same specimen (side view) $\times 147$.
- Fig. 12. *Tristix liasina* (side view). S. VD 372.5 (Lower Toarcian). $\times 272$.
- Fig. 13. Same specimen (lateral face view).
- Fig. 14. *Prodentalina compressa* (side view). S. VD 371 (Lower Toarcian). $\times 123$.
- Fig. 15. Same specimen (front view).
- Fig. 16. Same specimen (dorso-apertural view).
- Fig. 17. *Lingulonodosaria dentaliniformis* (side view). S. VD 373 (Lower Toarcian). $\times 126$.
- Fig. 18. Same specimen (oblique apertural view).

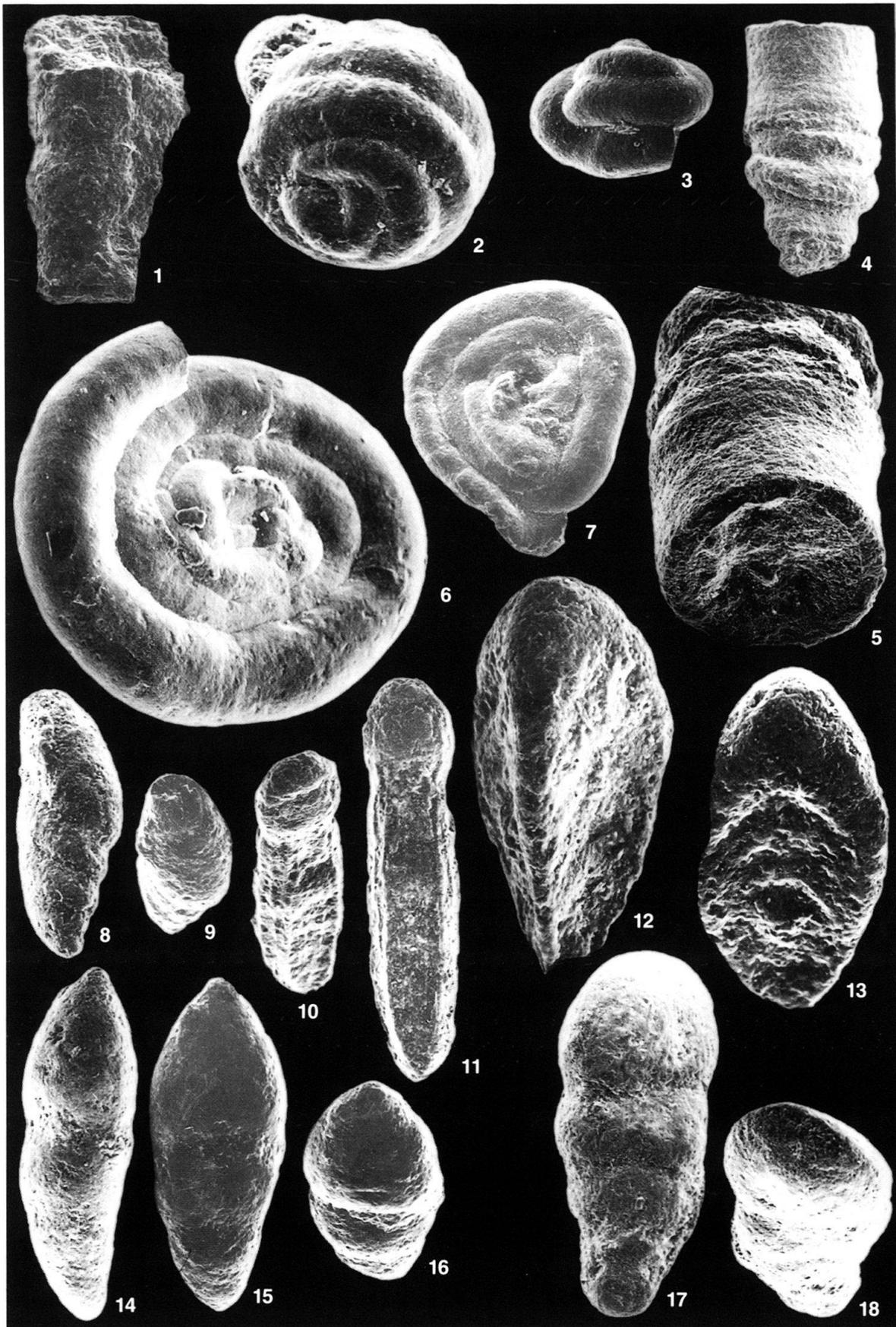


Plate 4: Carixian, Domerian and Lower Toarcian (Tenuicostatum Zone) microforaminifera.

Plate 5

- Fig. 1. *Reinholdella planiconvexa* (dorsal view). S. VD 360.9 (Lower Toarcian, Tenuicostatum Zone). × 131.
- Fig. 2. Same species (side view), second specimen. Same sample.
- Fig. 3. Same species (ventral view), third specimen. Same sample.
- Fig. 4. *Conicospirillina* sp. (dorsal view). S. VD 185.2 (Middle Toarcian, Erbaense Zone). × 130.
- Fig. 5. Same specimen (edge view).
- Fig. 6. Same specimen (ventral view).
- Fig. 7. *Ammobaculites* cfr. *vetusta*, S. VD 185.3 (Middle Toarcian, Erbaense Zone). × 128.
- Fig. 8. *Haplophragmoides kingakensis* (side view). S. VD 185.3 (Middle Toarcian, Erbaense Zone). × 61.
- Fig. 9. Same specimen (apertural view).
- Fig. 10. *Lenticulina* (*Astacolus*) *d'orbignyi* (side view). S. VD 185.5 (Middle Toarcian, Erbaense Zone). × 55.
- Fig. 11. Same specimen (edge view).
- Fig. 12. *Astacolus* cf. *stilla*. S. VD 185.5 (Middle Toarcian, Erbaense Zone). × 38.
- Fig. 13. *Astacolus* gr. *pennensis*. Same sample × 67.
- Fig. 14. *Vaginulinopsis deeckei parallela*. S. VD 185.3 (Middle Toarcian, Erbaense Zone). × 62.
- Fig. 15. *Vaginulinopsis* sp. (edge view). S. VD 185.5 (Middle Toarcian, Bifrons Zone).
- Fig. 16. Same specimen (side view). × 52.
- Fig. 17. *Falsopalmula tenuistriata*. S. VD 177 (Lower Aalenian). × 54.
- Fig. 18. *Astacolus dictyoides* (side view). Same sample. × 62.
- Fig. 19. Same specimen (oblique apertural view).
- Fig. 20. *Lenticulina* (*Astacolus*) *d'orbignyi*. S. VD 181.3 (Upper Toarcian, Meneghinii Zone). × 51.
- Fig. 21. *Astacolus similis*. S. VD 192.8 (Middle Toarcian, Bifrons Zone). × 107.
- Fig. 22. *Astacolus mutabilis*. S. VD 184.5 (Middle/Upper Toarcian, Erbaense). × 66.



Plate 5: Toarcian microforaminifers.

Plate 6

- Fig. 1. “Cigar-shaped” *Lenticulina münsteri* (axial view). Sample VD 184.3 (Upper Toarcian, Erbaense Zone). × 45.
- Fig. 2. Same specimen (oblique view).
- Fig. 3. Abraded *Lenticulina* sp. Sample VD 184.3 (Upper Toarcian, Erbaense Zone). × 73.
- Fig. 4. “Cigar-shaped” *Lenticulina* sp.. Same sample. × 60.
- Fig. 5. *Spiriferiina* (?) (brachial valve). S. VD 185.3 (Middle Toarcian, Erbaense Zone). × 30.
- Fig. 6. *Camptocythere toarciana* (left side). S. VD 184.5 (Middle/Upper Toarcian, Erbaense Zone). × 50.
- Fig. 7. *Procytherura multicostata* (left side). Same sample. × 190.
- Fig. 8. Low-trochospiral gastropod. S. VD 186.5 (Middle Toarcian, Brifrons Zone). × 100.
- Fig. 9. Bivalve (*Posidonidae*). S. VD 185.3 (Middle Toarcian, Erbaense Zone). × 30.
- Fig. 10. *Stenestroemia* (?) sp. (left side). S. VD 373 (Lower Toarcian, Tenuicostatum Zone). × 240.
- Fig. 11. *Monoceratina* sp (left side). Same sample. × 154.

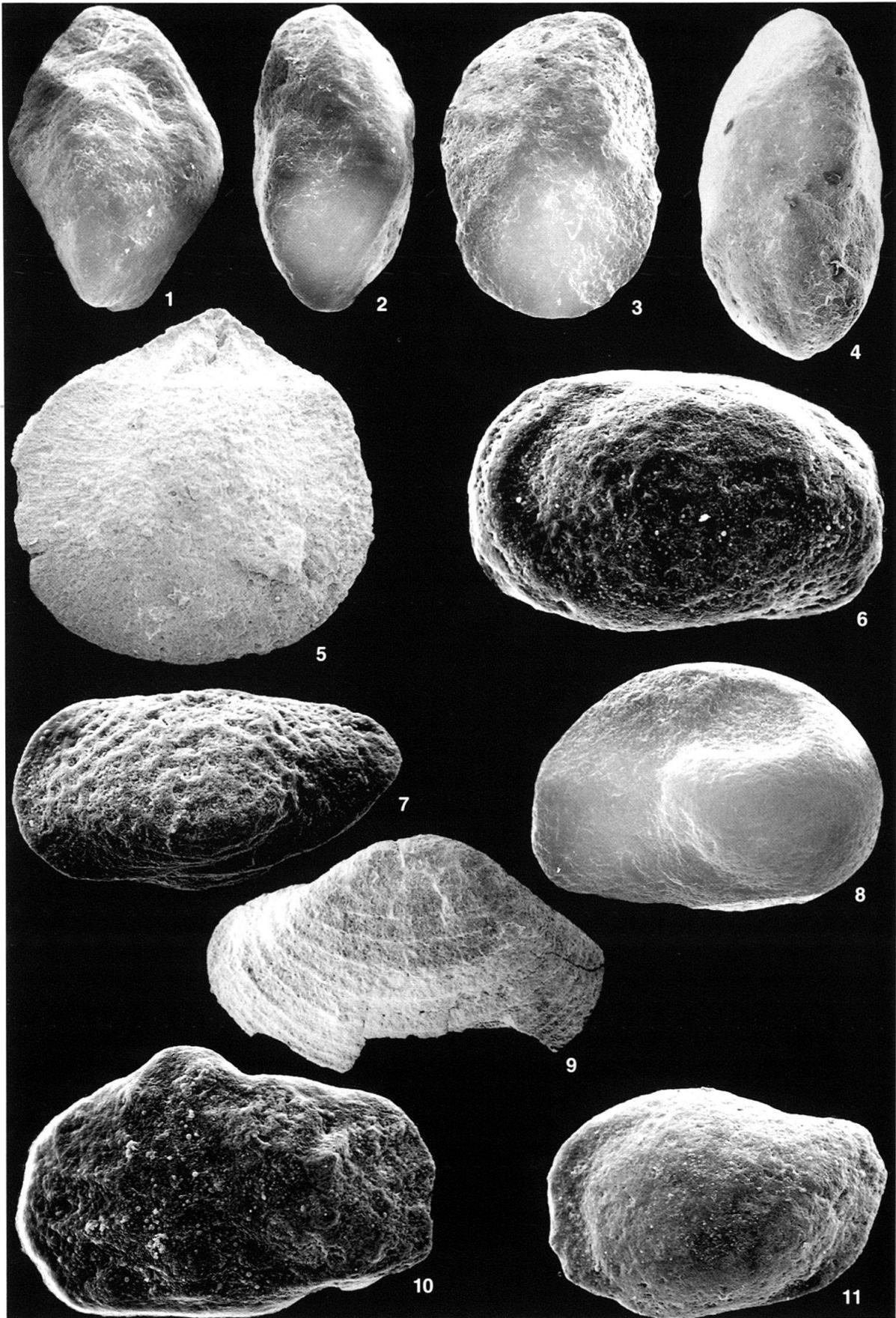


Plate 6: Abraded Lenticulina and other organisms.

