

**Zeitschrift:** Eclogae Geologicae Helvetiae  
**Herausgeber:** Schweizerische Geologische Gesellschaft  
**Band:** 78 (1985)  
**Heft:** 3

**Artikel:** Palynostratigraphische Gliederung und Korrelation des Permo-Karbon der Nordostschweiz  
**Autor:** Hochuli, Peter A.  
**Anhang:** Tafeln  
**Autor:** [s.n.]  
**DOI:** <https://doi.org/10.5169/seals-165678>

### **Nutzungsbedingungen**

Die ETH-Bibliothek ist die Anbieterin der digitalisierten Zeitschriften auf E-Periodica. Sie besitzt keine Urheberrechte an den Zeitschriften und ist nicht verantwortlich für deren Inhalte. Die Rechte liegen in der Regel bei den Herausgebern beziehungsweise den externen Rechteinhabern. Das Veröffentlichen von Bildern in Print- und Online-Publikationen sowie auf Social Media-Kanälen oder Webseiten ist nur mit vorheriger Genehmigung der Rechteinhaber erlaubt. [Mehr erfahren](#)

### **Conditions d'utilisation**

L'ETH Library est le fournisseur des revues numérisées. Elle ne détient aucun droit d'auteur sur les revues et n'est pas responsable de leur contenu. En règle générale, les droits sont détenus par les éditeurs ou les détenteurs de droits externes. La reproduction d'images dans des publications imprimées ou en ligne ainsi que sur des canaux de médias sociaux ou des sites web n'est autorisée qu'avec l'accord préalable des détenteurs des droits. [En savoir plus](#)

### **Terms of use**

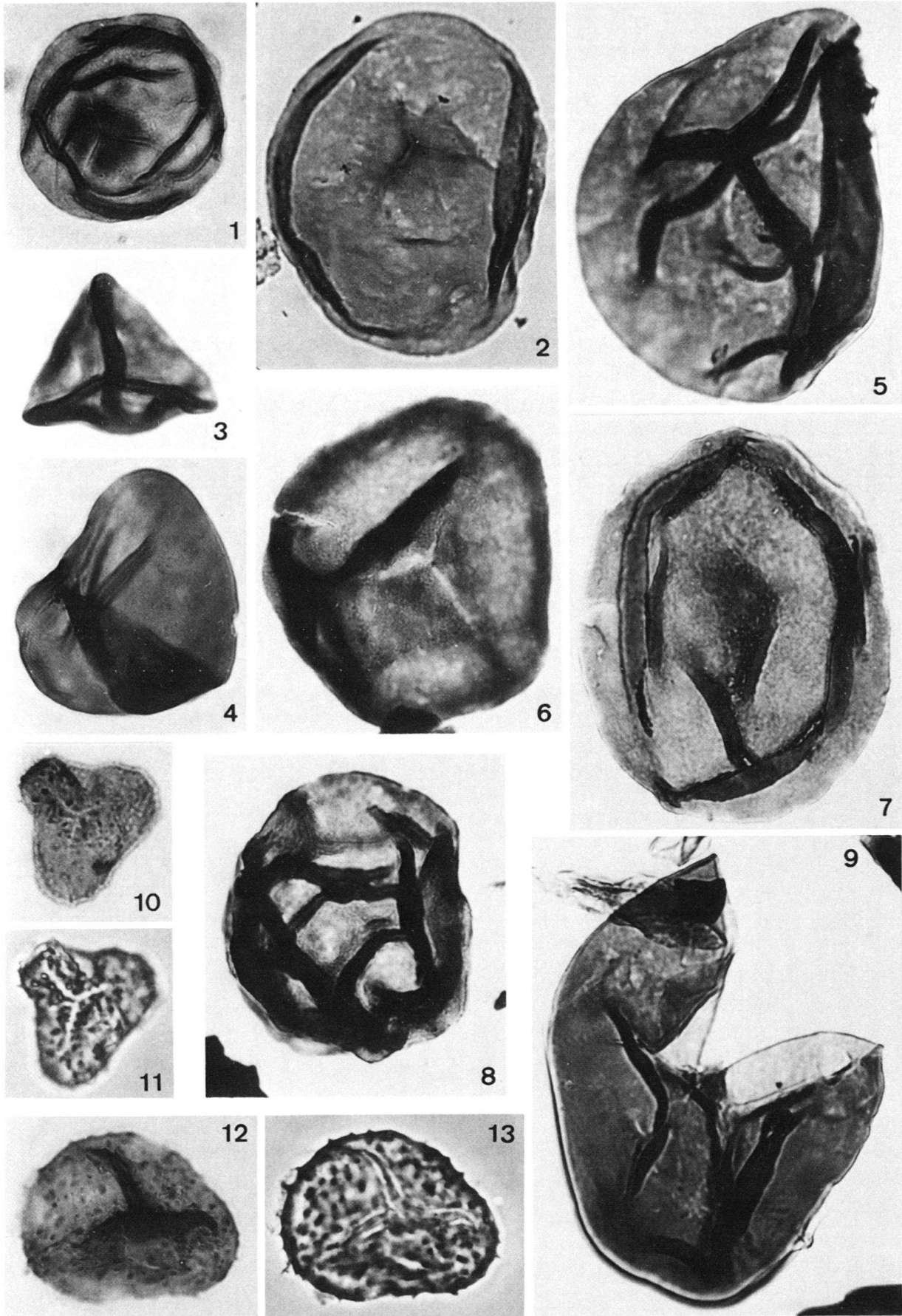
The ETH Library is the provider of the digitised journals. It does not own any copyrights to the journals and is not responsible for their content. The rights usually lie with the publishers or the external rights holders. Publishing images in print and online publications, as well as on social media channels or websites, is only permitted with the prior consent of the rights holders. [Find out more](#)

**Download PDF:** 22.02.2026

**ETH-Bibliothek Zürich, E-Periodica, <https://www.e-periodica.ch>**

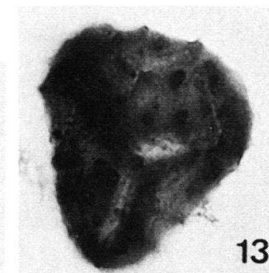
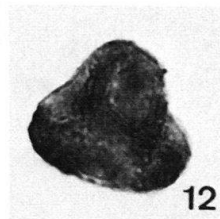
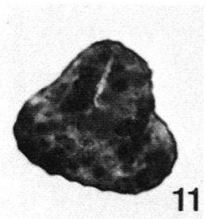
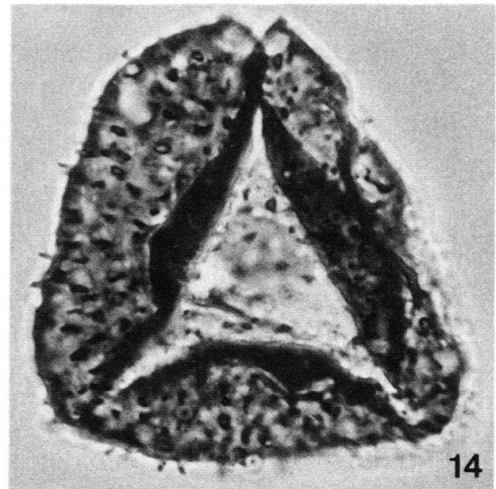
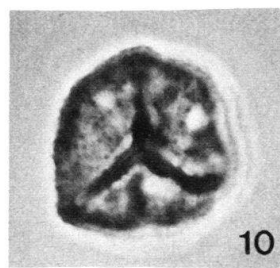
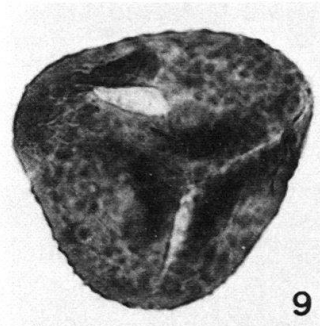
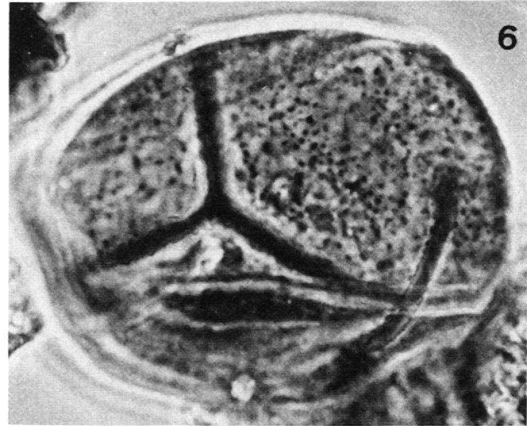
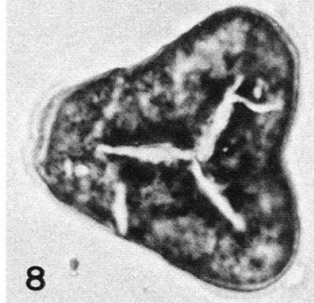
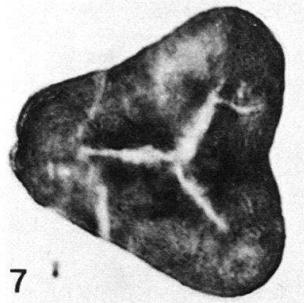
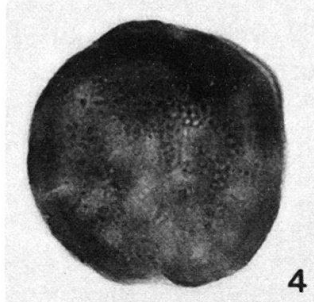
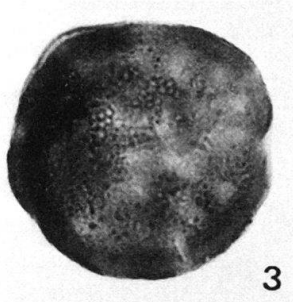
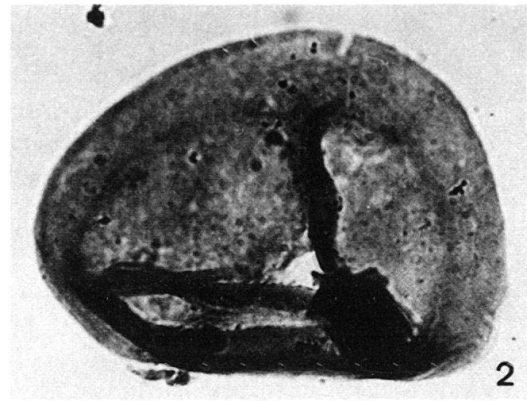
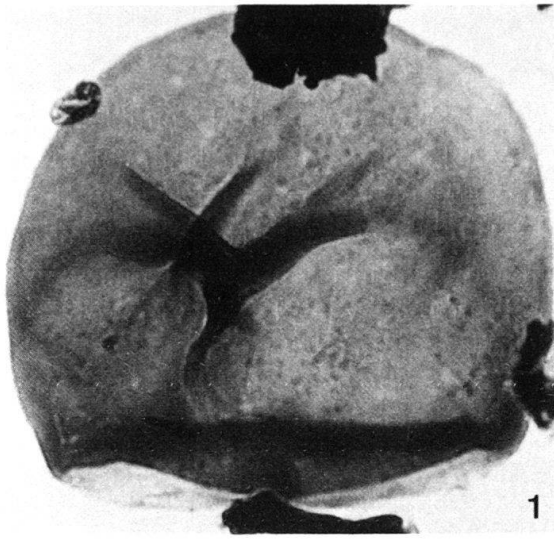
**Tafel 1**

- Fig. 1 *Calamospora* cf. *breviradiata* KOSANKE 1950; 43  $\mu$ , 1275.30/4 (43.8/84.7).
- Fig. 2 *Calamospora mutabilis* (LOOSE) SCHOPF, WILSON & BENTALL 1944; 98  $\mu$ , 1478.00/3 (33.5/85.5).
- Fig. 3 *Leiotriletes* sp. A (kleinste Form); 40  $\mu$ , 1275.30/1 (40.5/94.1).
- Fig. 4 *Leiotriletes* sp. B (kleine Form); 51  $\mu$ , 1275.30 (36.5/92.8).
- Fig. 5 *Leiotriletes* sp. C (mittlere Form); 100  $\mu$ , 1275.30/5 (27.5/81.3).
- Fig. 6 *Punctatisporites aerarius* BUTTERWORTH & WILLIAMS 1958; 69  $\mu$ , 1633.50/1 (42.5/107.8).
- Fig. 7 ?*Punctatisporites* sp. B, aff. *Calamospora obscura* PEPPERS 1964; 80  $\mu$ , 1478.00/1 (30.3/113.2).
- Fig. 8 ?*Punctatisporites* sp. A, aff. *Punctatisporites* sp. 5 (sensu PEPPERS 1964); 58  $\mu$ , 1654.00/1 (28.3/85.4).
- Fig. 9 *Leiotriletes* sp. D (grösste Form); 150  $\mu$ , 1275.30/4 (38.6/90.1).
- Fig. 10–11 *Acanthotriletes aculeolatus* (KOSANKE) POTONIÉ & KREMP 1955; 21  $\mu$ , 1952.85/1 (33/88.4).
- Fig. 12–13 *Apiculatisporis aculeatus* IBRAHIM 1933 emend. SMITH & BUTTERWORTH 1967; 44  $\mu$ , 1275.30/1 (37/67.3).



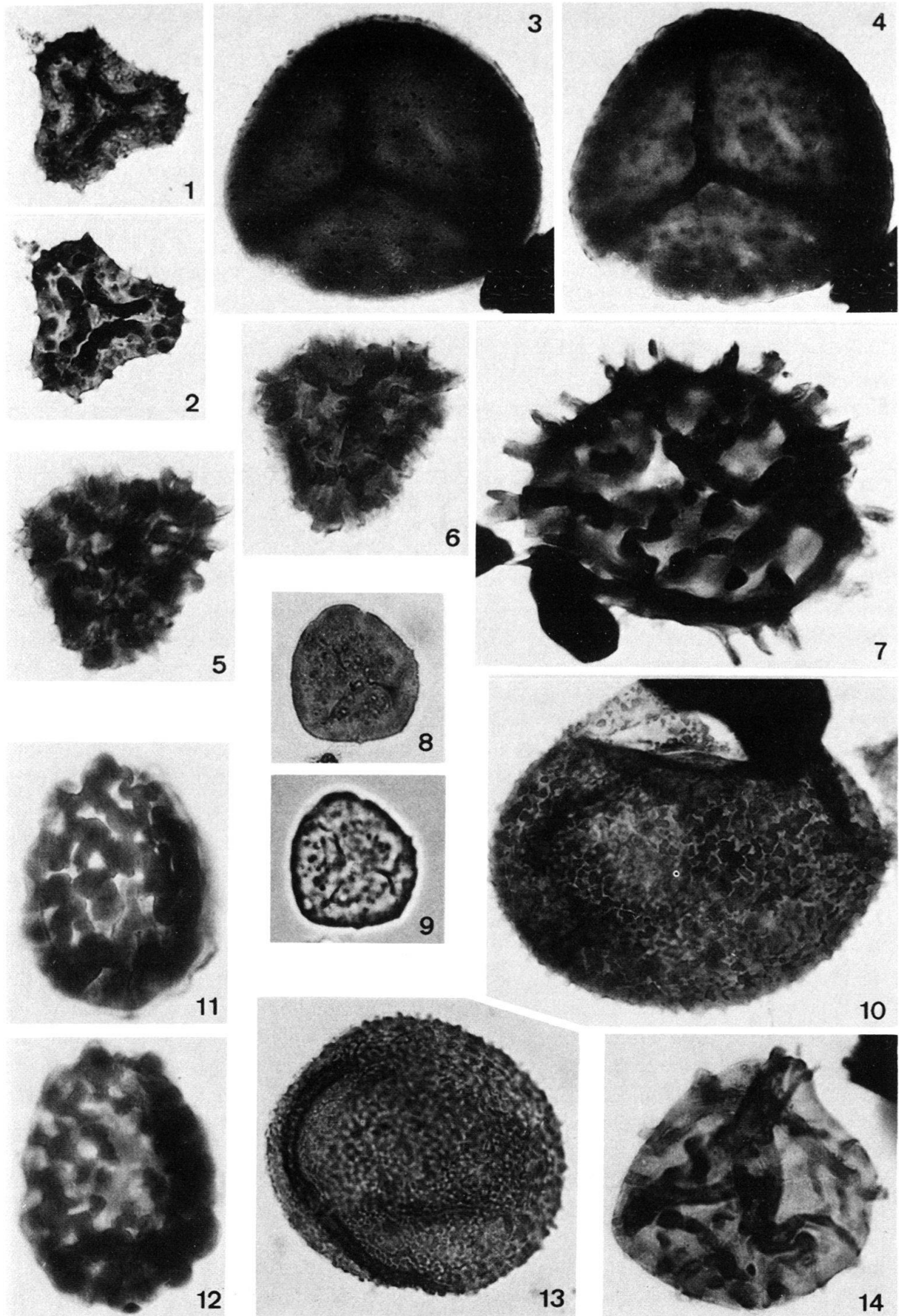
**Tafel 2**

- Fig. 1 *Punctatisporites* cf. *obesus* (LOOSE) POTONIÉ & KREMP 1955; 118  $\mu$ , 1275.30/3 (39.5/96.2).
- Fig. 2 *Cadiospora magna* KOSANKE 1950; 98  $\mu$ , 1478.00/1 (34/106.5).
- Fig. 3–4 *Cyclogranisporites minutus* BHARDWAJ 1957; 40  $\mu$ , 1275.30/4 (29/95.8).
- Fig. 5–6 *Cyclogranisporites aureus* (LOOSE) POTONIÉ & KREMP 1955; 75  $\mu$ , 1275.30/4 (39.8/76.8).
- Fig. 7–8 *Granulatisporites parvus* (IBRAHIM) POTONIÉ & KREMP 1955; 44  $\mu$ , 1689.00/1 (28.5/101.7).
- Fig. 9 *Converrucosisporites* cf. *armatus* (DYBOVÁ & JACHOWICZ) SMITH & BUTTERWORTH 1967; 46  $\mu$ , 1275.30 (27/81.9).
- Fig. 10 *Granulatisporites* sp. A; 20  $\mu$ , 1275.30/3 (32.3/97).
- Fig. 11–12 *Lophotriletes commissuralis* (KOSANKE) POTONIÉ & KREMP 1955; 26  $\mu$ , 1501.90/1 (36.3/114.4).
- Fig. 13 *Lophotriletes gibbosus* (IBRAHIM) POTONIÉ & KREMP 1955; 37  $\mu$ , 1478.00/1 (37.2/95.8).
- Fig. 14 *Apiculatisporis setulosus* (KOSANKE) PIÉRAT 1962; 69  $\mu$ , 1478.0/2 (39.7/75.7).



**Tafel 3**

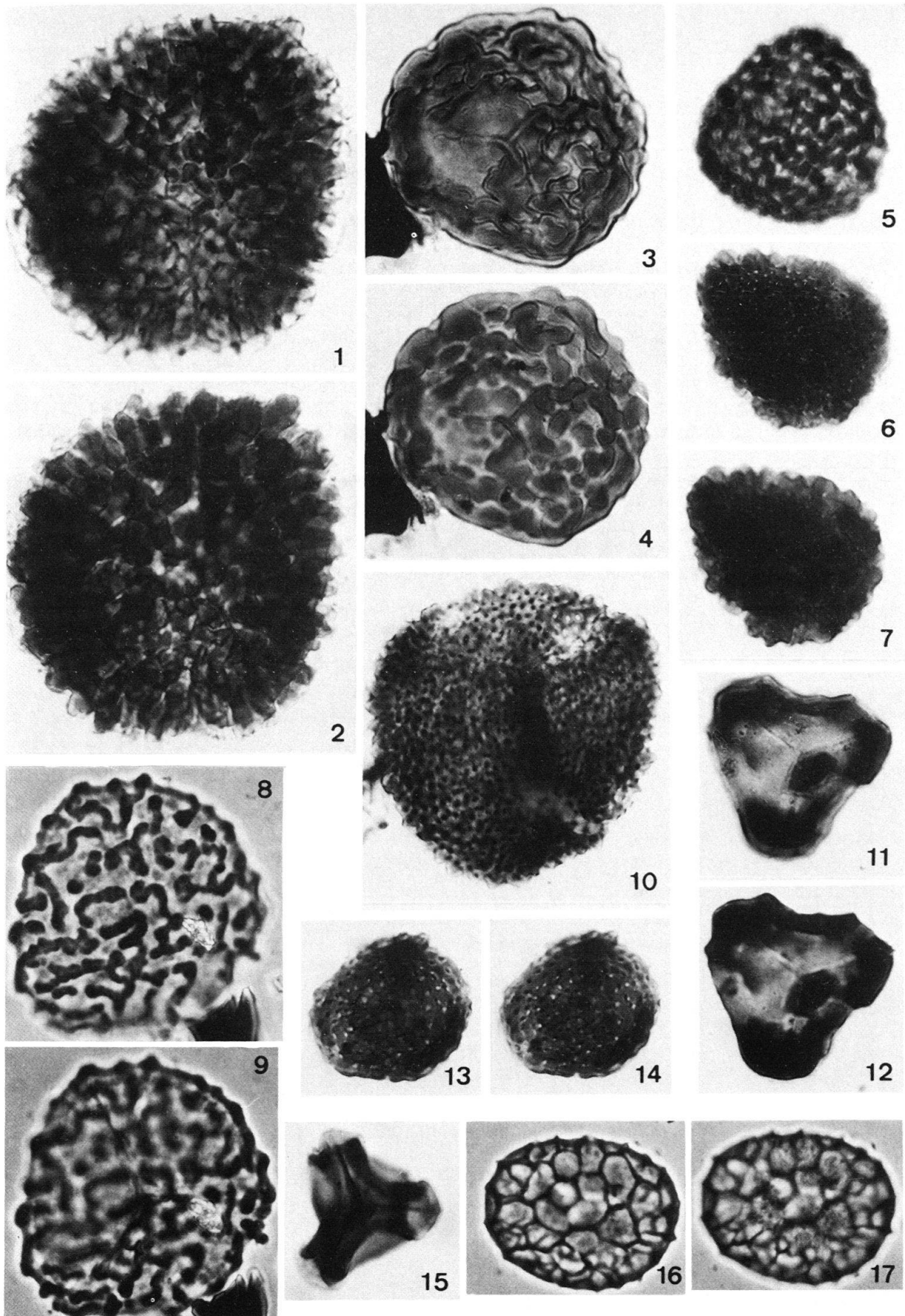
- Fig. 1–2      *Lophotriteles ibrahimii* (PEPPERS) PI-RADONY & DOUBINGER 1968; 35  $\mu$ , 1654.00/1 (28.5/108.7).
- Fig. 3–4      *Lundbladispora gigantea* (ALPERN) DOUBINGER 1968; 67  $\mu$ , 1289.0/5 (33.7/70.8).
- Fig. 5–6      *Raistrickia* cf. *rubida* KOSANKE 1950; 46  $\mu$ , 1275.30/3 (34/95).
- Fig. 7         *Raistrickia saetosa* (LOOSE) SCHOPF, WILSON & BENTALL 1944; 65  $\mu$  (Sporenkörper), 1827.00/2 (33.3/91.6).
- Fig. 8–9      *Verrucosisporites elegans* INOSSOVA, in INOSSOVA et al. 1976; 28  $\mu$ , 1289.00/1 (36/103.6).
- Fig. 10       *Verrucosisporites verrucosus* (IBRAHIM) IBRAHIM 1933; 78  $\mu$ , 1275.30/3 (43.8/103).
- Fig. 11–12    *Convolutispora clivosa* INOSSOVA, in INOSSOVA et al. 1976; 56  $\mu$ , 1258.50/1 (41/90.9).
- Fig. 13       *Verrucosisporites sinensis* IMGRUND 1952; 60  $\mu$ , 1275.30/4 (43.1/70.7).
- Fig. 14       *Raistrickia* cf. *superba* (IBRAHIM) SCHOPF, WILSON & BENTALL 1944; 56  $\mu$ , 1275.30/4 (32.5/76.5).



**Tafel 4**

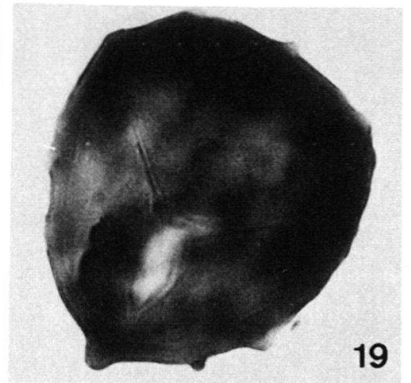
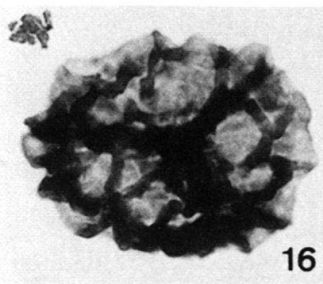
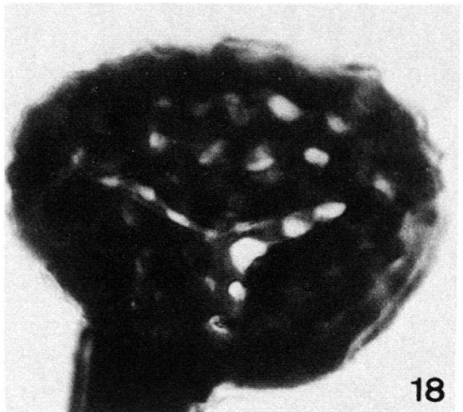
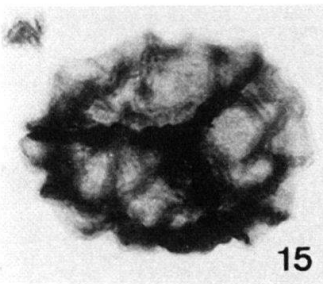
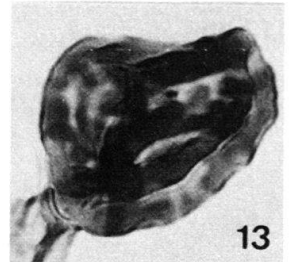
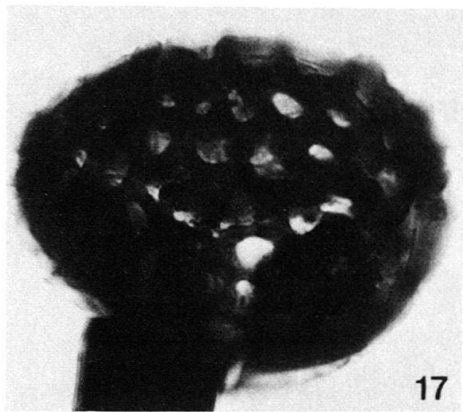
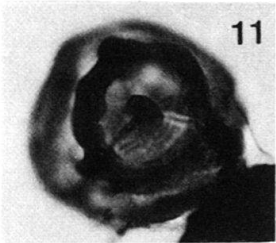
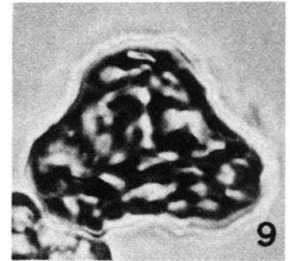
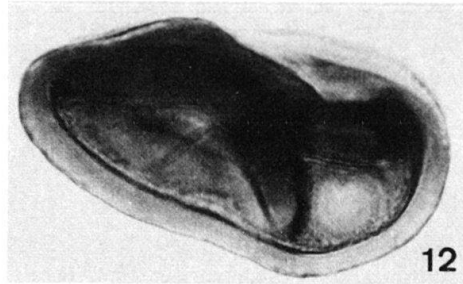
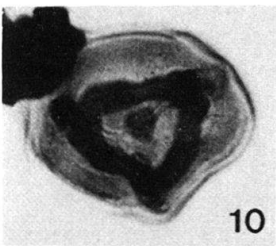
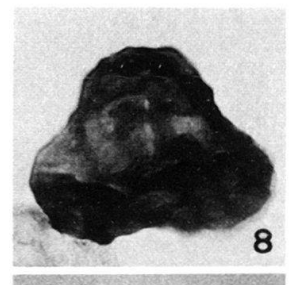
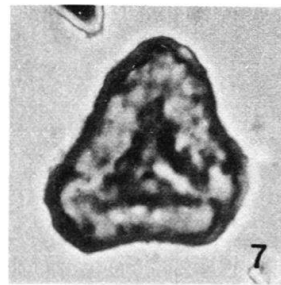
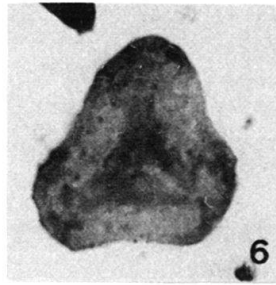
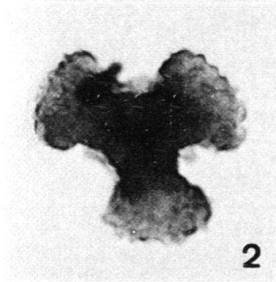
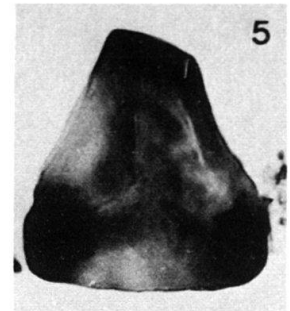
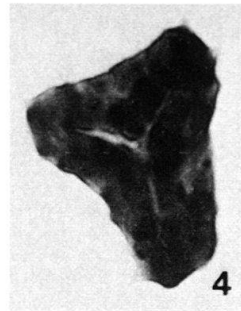
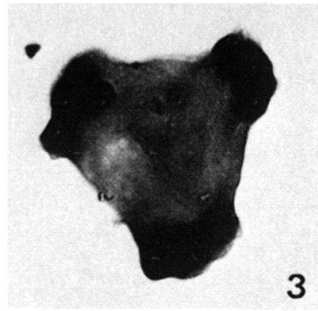
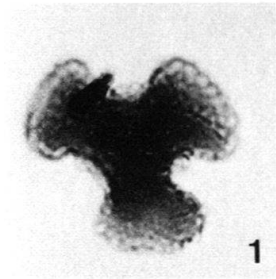
- Fig. 1–2            *Convolutispora* cf. *alpernii* PI-RADONY & DOUBINGER 1968; 74  $\mu$ , 1403.00/1 (39.7/65.3).
- Fig. 3–4            *Convolutispora* sp. 2 (sensu PEPPERS 1970); 50  $\mu$ , 1275.3/3 (33.5/82.7).
- Fig. 5              *Microreticulatisporites* cf. *microtuberosus* (LOOSE) POTONIÉ & KREMP 1955; 40  $\mu$ , 1689.00/1 (40.5/92.4).
- Fig. 6–7            *Microreticulatisporites sulcatus* (WILSON & KOSANKE) BUTTERWORTH & WILLIAMS 1967; 43  $\mu$ , 1275.30/4 (31.2/87.7).
- Fig. 8–9            *Camptotriletes triangularis* PEPPERS 1970; 52  $\mu$ , 1283.55/1 (35.4/87.8).
- Fig. 10             *Microreticulatisporites lacunosus* (IBRAHIM) KNOX 1950; 80  $\mu$ , 1275.3/4 (30.5/87.5).
- Fig. 11–12         *Firmysporites* cf. *irregularis* PI-RADONY & DOUBINGER 1968; 39  $\mu$ , 1614.50/1 (48.7/101.4).
- Fig. 13–14         *Microreticulatisporites nobilis* (WICHER) KNOX 1950; 34  $\mu$ , 1350.30/1 (37.4/82.4).
- Fig. 15             *Ahrensiporites* cf. *guerickei* (HORST) POTONIÉ & KREMP 1954; 33  $\mu$ , 1275.30/3 (40.1/100.8).
- Fig. 16–17         *Retitriletes* sp. A; 37  $\mu$ , 1283.55/2 (36/73.8).





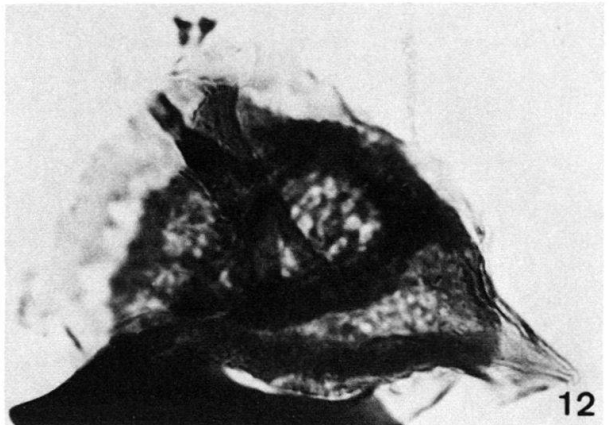
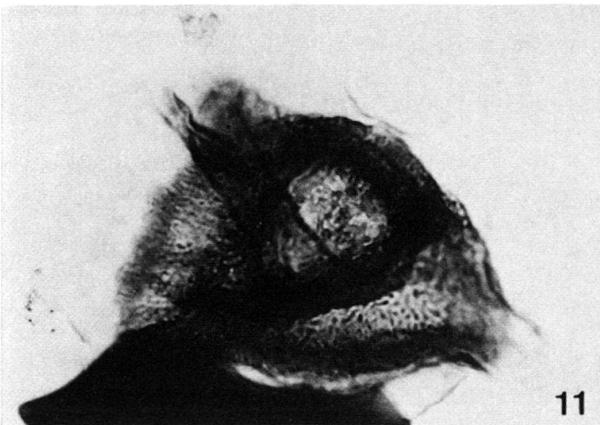
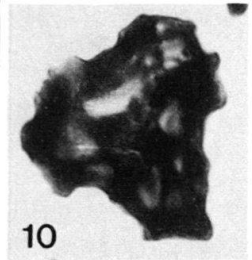
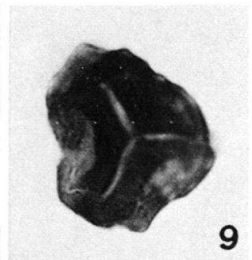
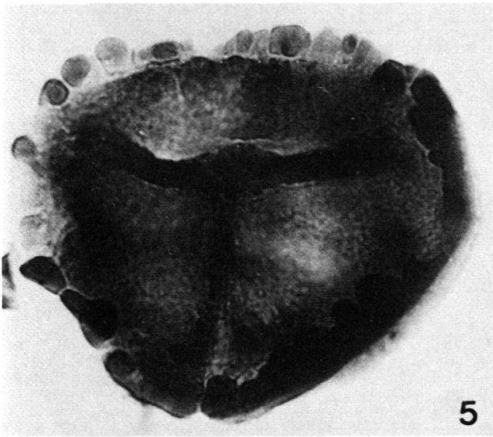
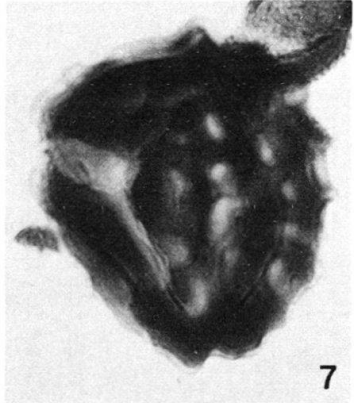
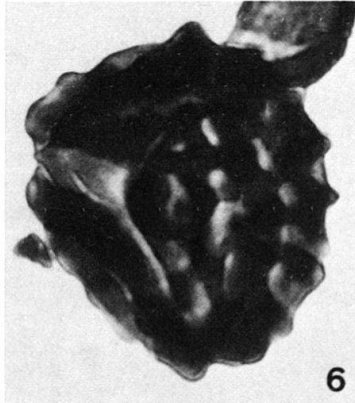
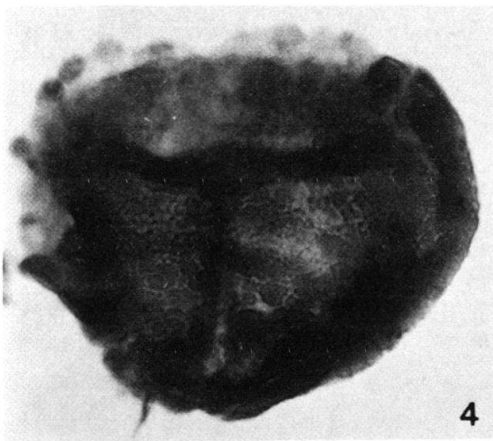
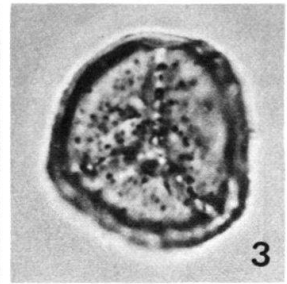
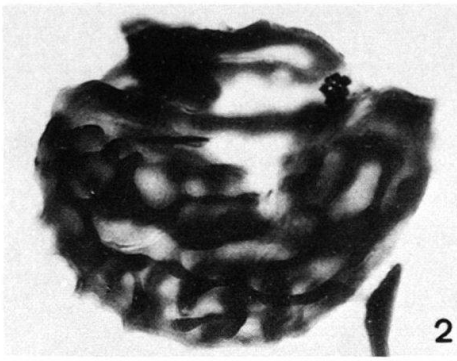
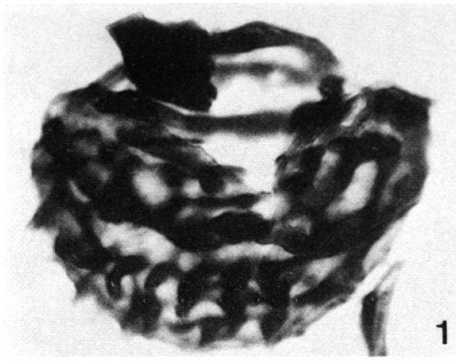
**Tafel 5**

- Fig. 1–2 *Tripartites aductus* (ISCHENKO) SHWARTSMAN, in INOSSOVA et al. 1976; 32  $\mu$ , 1289.00/1 (39.2/106/8).
- Fig. 3 *Triquitrites protensus* KOSANKE 1950; 37  $\mu$ , 1478.0/2 (39.8/76.6).
- Fig. 4 *Triquitrites tripartitus* ALPERN 1958; 37  $\mu$ , 1289.0/5 (37/78).
- Fig. 5 *Triquitrites tribullatus* (IBRAHIM) SCHOPF, WILSON & BENTALL 1944; 43  $\mu$ , 1275.30/3 (31.4/94.5).
- Fig. 6–7 *Triquitrites* sp. 2 (sensu PEPPERS 1964); 24  $\mu$ , 1654.00/1 (41.5/83.6).
- Fig. 8–9 *Triquitrites* sp. 4 (sensu PEPPERS 1964); 36  $\mu$ , 1275.30/1 (35.8/93.8).
- Fig. 10 *Knoxisporites glomus* SHWARTSMAN, in INOSSOVA et al. 1976; 34  $\mu$ , 1275.30/3 (29.4/65.8).
- Fig. 11 *Knoxisporites glomus* SHWARTSMAN, in INOSSOVA et al. 1976; 33  $\mu$ , 1275.30/1 (43.3/80).
- Fig. 12 *Polymorphisporites laevigatus* ALPERN 1958; 65  $\mu$ , 1275.30/3 (38.4/75.3).
- Fig. 13–14 *Polymorphisporites reticuloides* ALPERN 1958; 37  $\mu$ , 1289.0/5 (42.4/100.8).
- Fig. 15–16 *Reticulatisporites* cf. *reticulocingulum* LOOSE 1934; 44  $\mu$ , 1689.00/1 (34/93.2).
- Fig. 17–18 *Savitrissporites camptotus* (ALPERN) DOUBINGER 1968; 69  $\mu$ , 1586.80/1 (33.7/111).
- Fig. 19 *Triquitrites spinosus* (KOSANKE) HELBY 1966; 56  $\mu$ , 1586.8/1 30.6/100.7).



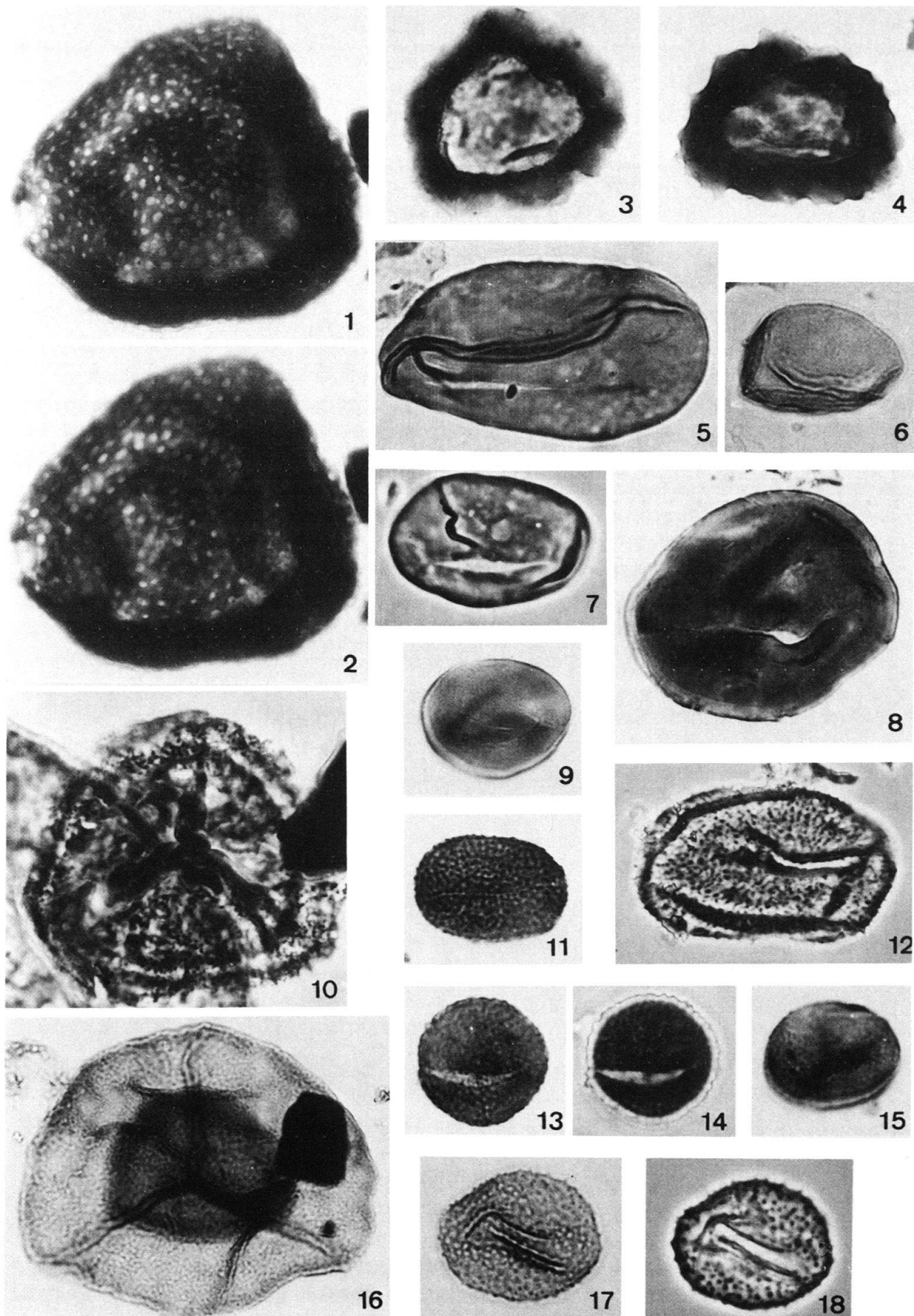
**Tafel 6**

- Fig. 1–2            *Savitrisorites* aff. *camptotus* (ALPERN) DOUBINGER 1968; 90  $\mu$ , 1586.80/1 (36/94.1).
- Fig. 3             *Lycospora pusilla* (IBRAHIM) SCHOPF, WILSON & BENTALL 1944; 33  $\mu$ , 1478.00/2 (32.7/110).
- Fig. 4–5          *Secarisporites* cf. *crenatus* PEPPERS 1964; 71  $\mu$ , 1633.50/1 (32.5/90.4).
- Fig. 6–7          *Savitrisorites* sp. A; 53  $\mu$ , 1586.80/4 (35.5/74.8).
- Fig. 8             *Crassispora kosankei* (POTONIÉ & KREMP) BHARDWAJ 1957; 81  $\mu$ , 1478.00/2 (46.2/95.3).
- Fig. 9             ?*Westphalensisporites irregularis* ALPERN 1958; 31  $\mu$ , 1501.90/1 (33.2/104.9).
- Fig. 10            ?*Westphalensisporites irregularis* ALPERN 1958; 34  $\mu$ , 1827.00/2 (33.3/91.6).
- Fig. 11–12        *Cirratriradites annulatus* KOSANKE & BROKAW, in KOSANKE 1950; 80  $\mu$ , 1275.30 (33.8/90.3).



**Tafel 7**

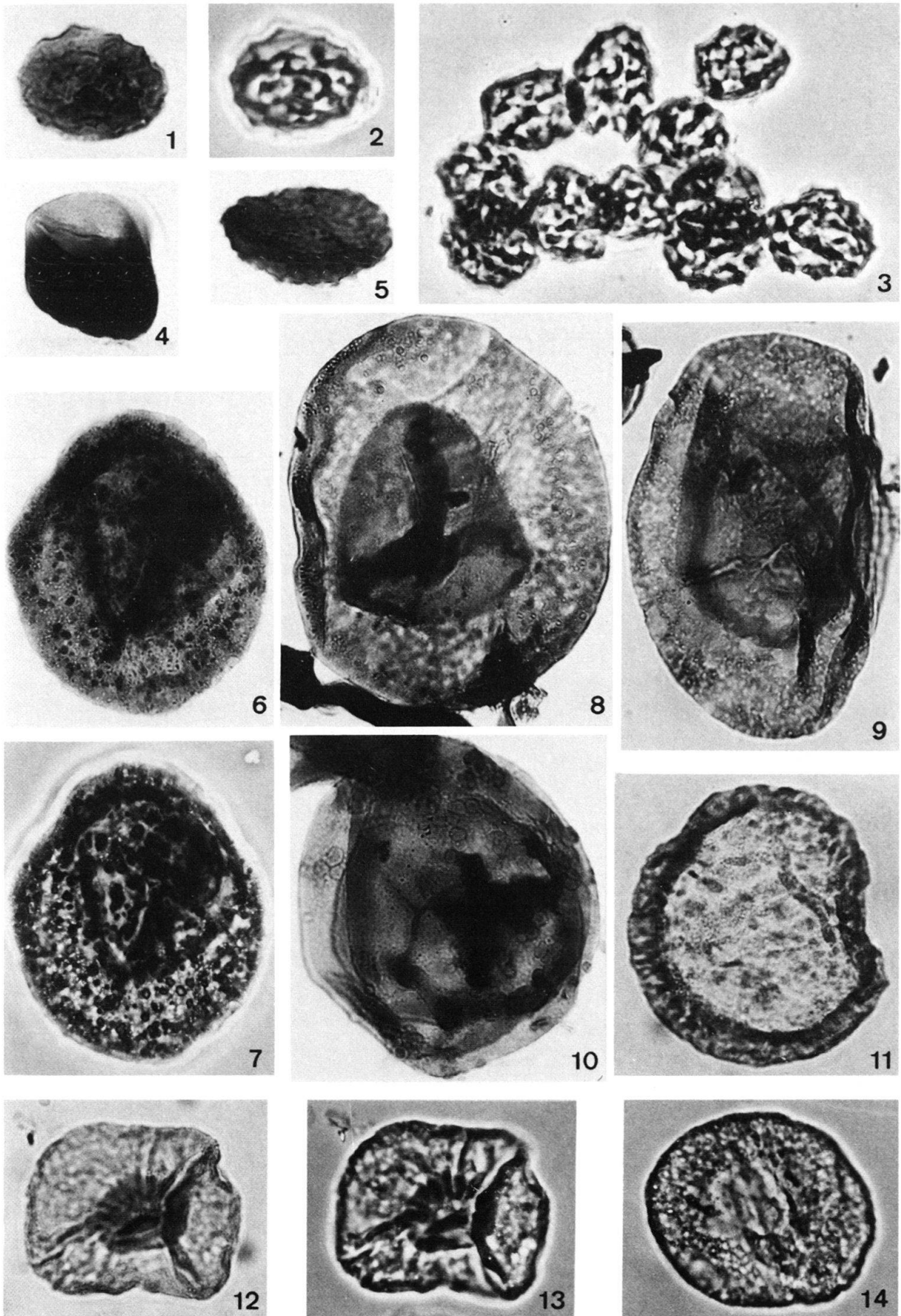
- Fig. 1–2 *Vestispora fenestrata* (KOSANKE & BROKAW) WILSON & VENKATACHALA 1963; 71  $\mu$ , 1827.00/2 (44.5/79).
- Fig. 3 *Densosporites granulosis* KOSANKE 1950; 46  $\mu$ , 1827.00/2
- Fig. 4 *Densosporites rufus* KOSANKE 1950; 45  $\mu$ , 1275.30/3 (35.2/72.7).
- Fig. 5 *Laevigatosporites vulgaris* IBRAHIM 1933; 65  $\mu$ , 1275.30/4 (30.3/88.2).
- Fig. 6 *Laevigatosporites minimus* (WILSON & COE) SCHOPF, WILSON & BENTALL 1944; 23  $\mu$ , 1262.10/4 (41.2/94.1).
- Fig. 7 *Laevigatosporites minor* LOOSE 1934; 40  $\mu$ , 1275.30/4 (45.3/81).
- Fig. 8 *Latosporites cf. latus* (KOSANKE) POTONIÉ & KREMP 1954; 56  $\mu$ , 1275.30/3 (29.4/78.2).
- Fig. 9 *Latosporites globosus* (SCHEMEL) POTONIÉ & KREMP 1954; 26  $\mu$ , 1275.30/3 (27.3/93.6).
- Fig. 10 *Cirratriradites cf. annuliformis* KOSANKE & BROKAW, in KOSANKE 1950; 63  $\mu$ , 1289.00/5 (42.3/73.5).
- Fig. 11 *Punctatosporites granifer* (POTONIÉ & KREMP) ALPERN & DOUBINGER 1973; 23  $\mu$ , 1586.80/1 (31.2/107.2).
- Fig. 12 *Spinoporites spinosus* ALPERN 1958; 54  $\mu$ , 1478.0/2 (41/100).
- Fig. 13–14 *Punctatosporites rotundus* BHARDWAJ 1957, emend. ALPERN & DOUBINGER 1973; 19  $\mu$ , 1586.80/3 (38/105.1).
- Fig. 15 *Punctatosporites minutus* IBRAHIM 1933 emend. ALPERN & DOUBINGER 1973; 19  $\mu$ , 1827.00/1 (44.8/90).
- Fig. 16 *Endosporites globiformis* (IBRAHIM) SCHOPF, WILSON & BENTALL 1944; 102  $\mu$ , 1501.90/1 (38.5/97.7).
- Fig. 17–18 *Spinoporites exiguus* UPSHAW & HEDLUND 1967; 22  $\mu$ , 1275.30/4 (45.8/88.3).



**Tafel 8**

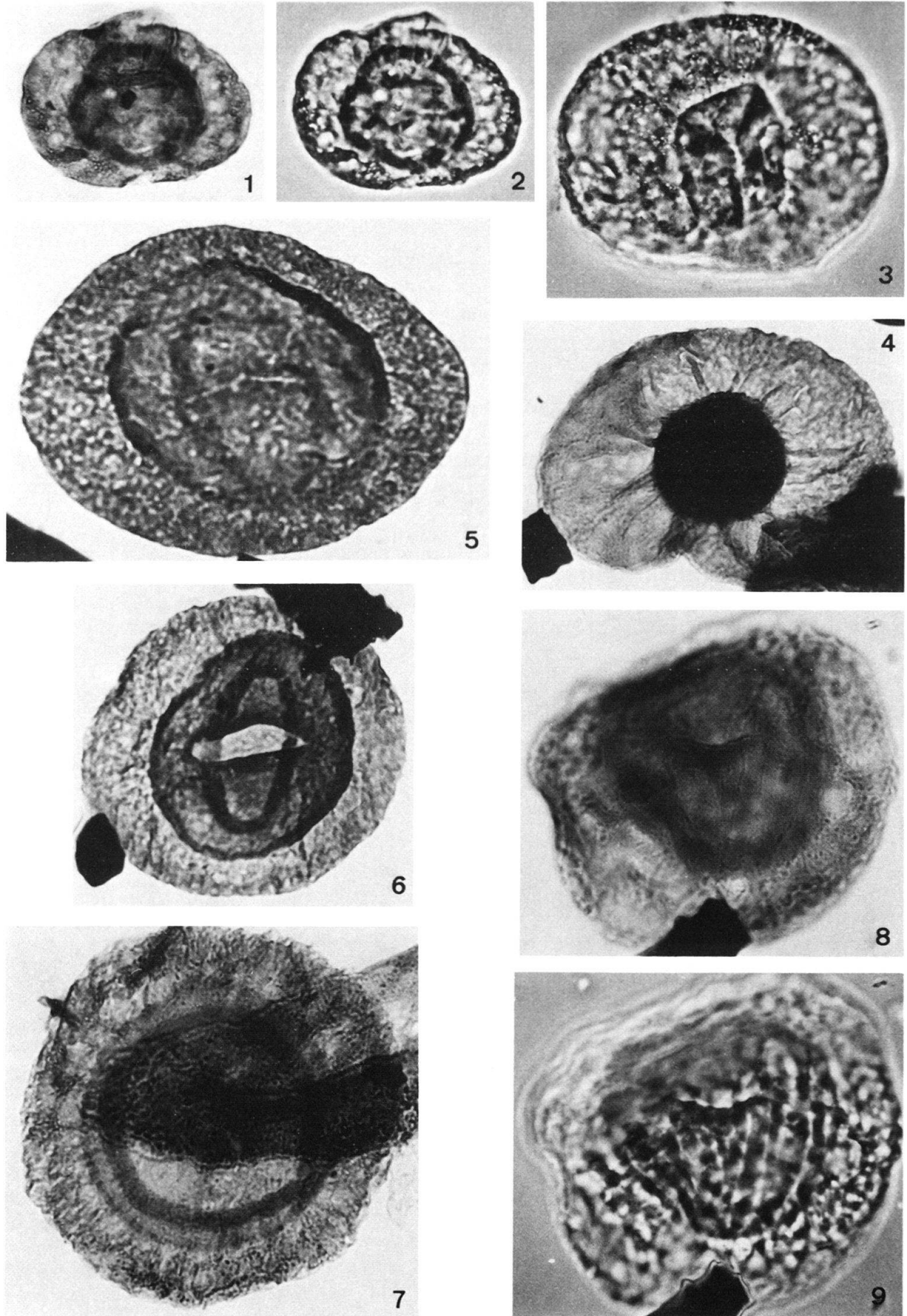
- Fig. 1–2      *Thymospora thiessenii* (KOSANKE) WILSON & VENKATACHALA 1963; 22  $\mu$ , 1275.30/4 (41.3/86.6).
- Fig. 3      *Thymospora thiessenii*; 1478.00/2 (45.1/112.2); Ansammlung von mehreren Sporen.
- Fig. 4      *Torispora securis* BALME 1952; 33  $\mu$ , 1275.3/4 (38.97.2).
- Fig. 5      *Thymospora pseudothiessenii* (KOSANKE) WILSON & VENKATACHALA 1963; 34  $\mu$ , 1275.3/4 (37.3/98.4).
- Fig. 6–7      *Wilsonites* sp. A; 62  $\mu$ , 1275.30/5 (38.3/64.7).
- Fig. 8      *Wilsonites vesicatus* (KOSANKE) KOSANKE 1959; 79  $\mu$ , 1275.30/4 (29/79.6).
- Fig. 9      *Candidispora candida* VENKATACHALA 1963; 116  $\mu$ , 1275.30/3 (47/84.3).
- Fig. 10      *Wilsonites* sp. B; 69  $\mu$ , 1275.30/4 (37/96.8).
- Fig. 11      *Latensina trileta* ALPERN 1958; 56  $\mu$ , 1275.3/4 (36.4/67).
- Fig. 12–13      *Florinites minutus* BHARDWAJ 1957; 45  $\mu$ , 1275.30/4 (41.3/82.2).
- Fig. 14      *Florinites mediapudens* (LOOSE) POTONIÉ & KREMP 1956; 46  $\mu$ , 1275.30/3 (38.8/87.6).





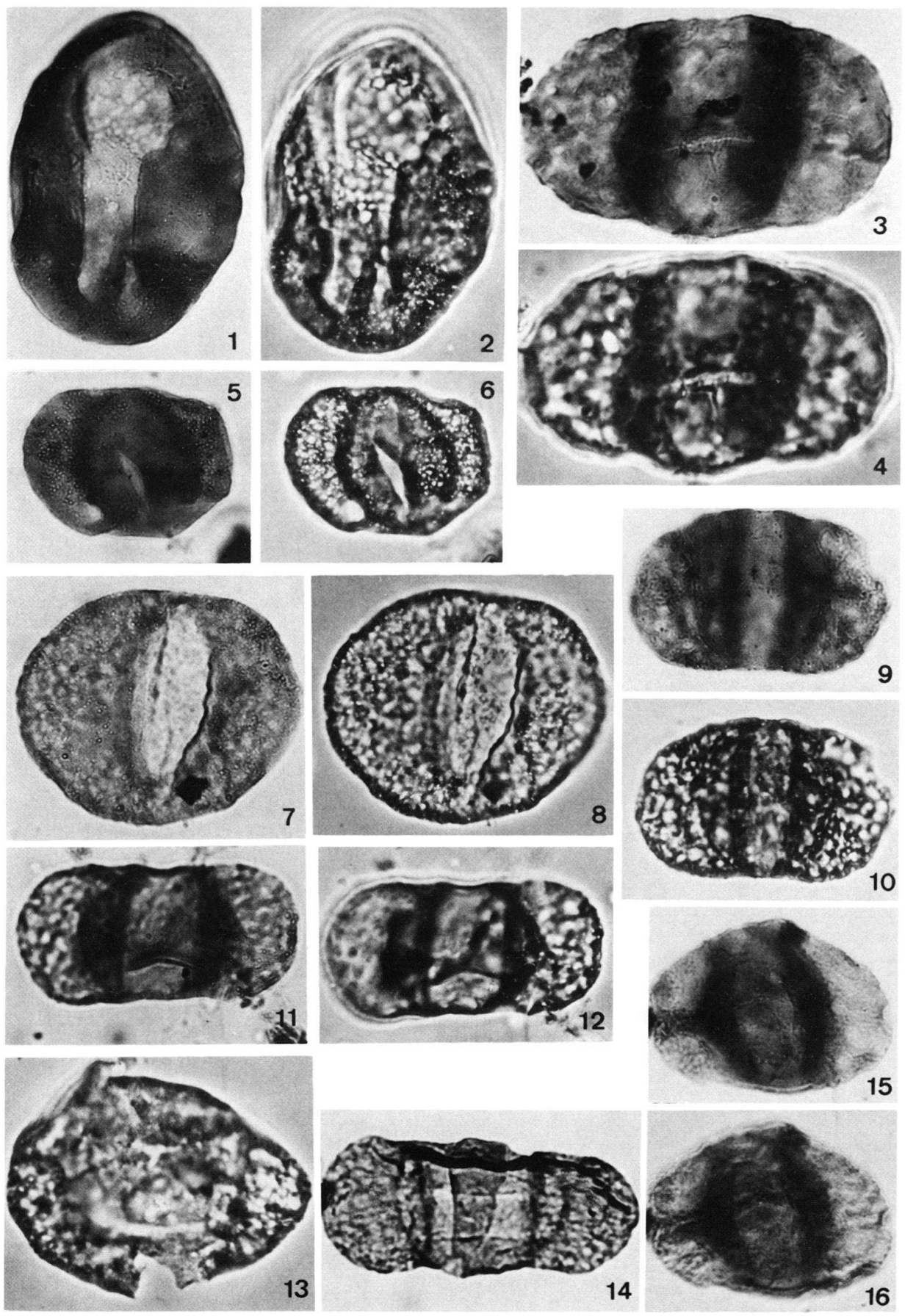
**Tafel 9**

- Fig. 1–2            *Florinites mediapudens* (LOOSE) POTONIÉ & KREMP 1956; 46  $\mu$ , 1289.0/5 (32/102.2).
- Fig. 3             *Florinites* cf. *junior* POTONIÉ & KREMP 1956; 65  $\mu$ , 1275.3/3 (27.5/103.5).
- Fig. 4             *Florinites volans* (LOOSE) POTONIÉ & KREMP 1956; 104  $\mu$ , 1289.0/5 (42.5/87.2).
- Fig. 5             *Potonieisporites novicus* BHARDWAJ 1954; 130  $\mu$ , 1289.0/5 (26.5/72.7).
- Fig. 6             *Potonieisporites bhardwajii* REMY & REMY 1961; 92  $\mu$ , 1289.00/1, (32.5/97).
- Fig. 7             *Nuskoisporites* aff. *dulhuntyii* PONTONIÉ & KLAUS 1954; 74  $\mu$ , 1289.00/1 (28.4/89.4).
- Fig. 8–9          *Crustaesporites globosus* LESCHIK 1956; 108  $\mu$ , 1350.30/1 (47.8/104.7).



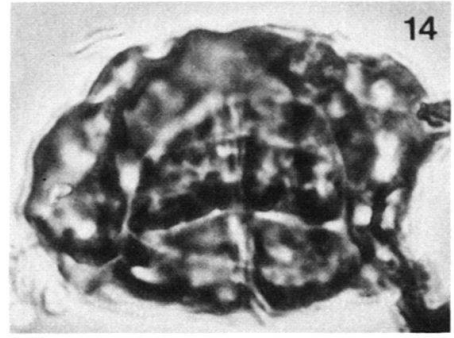
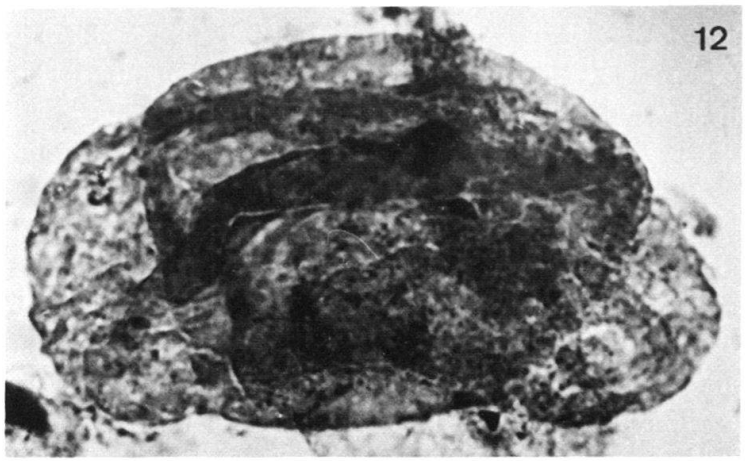
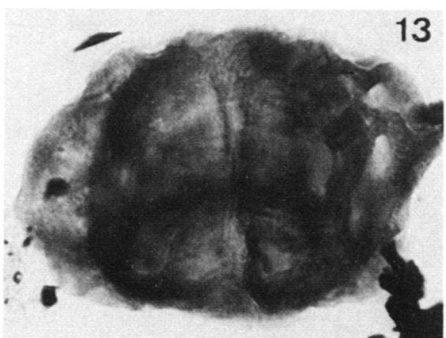
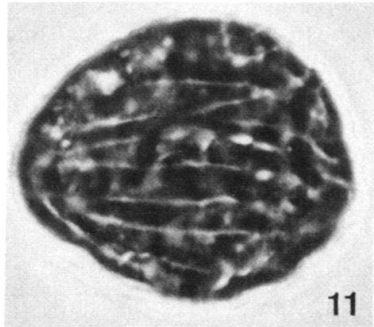
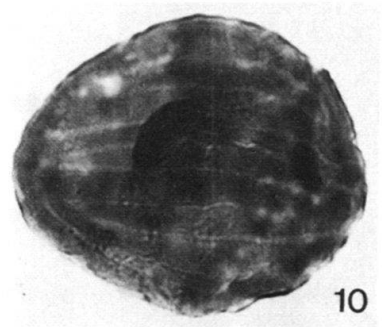
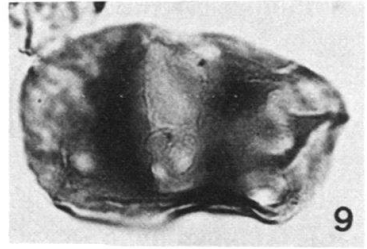
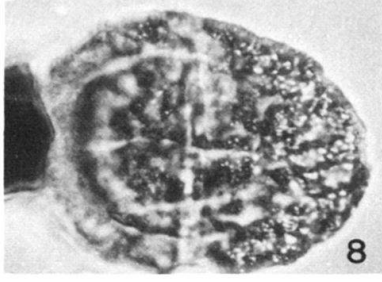
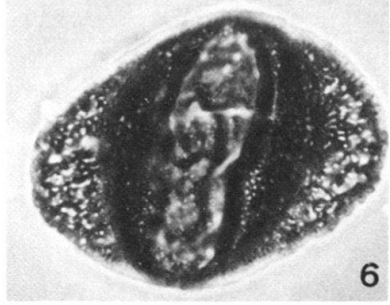
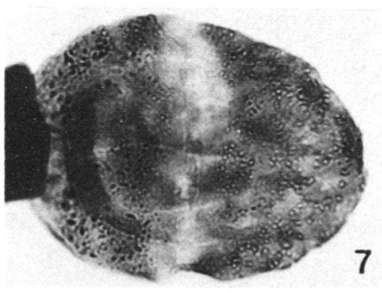
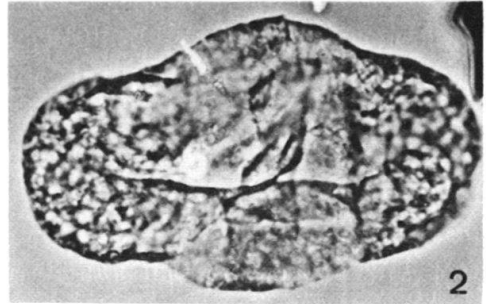
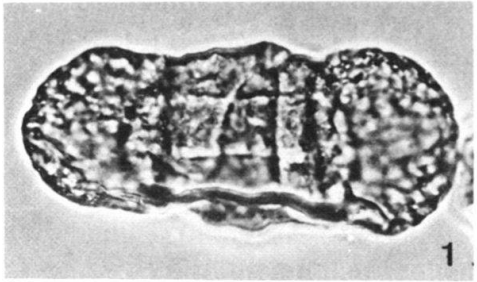
**Tafel 10**

- Fig. 1–2            *Divarisaccus* cf. *leleii* VENKATACHALA & KAR 1966; 66  $\mu$ , 1275.30/1 (37/95).
- Fig. 3–4            *Limitisporites* sp., 72  $\mu$ , 1451.50/5 (48/103.9).
- Fig. 5–6            *Vesicaspora* cf. *wilsonii* (SCHEMEL) WILSON & VENKATACHALA 1963; 44  $\mu$ , 1275.30/4 (43.2/83).
- Fig. 7–8            *Vesicaspora* sp.; 58  $\mu$ , 1275.3/3 (27/75).
- Fig. 9–10          *Falcisporites* cf. *zapfeii* (POTONIÉ & KLAUS) LESCHICK 1956; 52  $\mu$ , 1689.00/1 (40.5/104).
- Fig. 11–12        *Jugasporites* sp.; 58  $\mu$ , 1275.3/4 (44/94).
- Fig. 13            *Illinites* cf. *elegans* KOSANKE 1950; 58  $\mu$ , 1283.55/1 (38.2/103.6).
- Fig. 14            *Hamiapollenites* cf. *tractiferinus* (SAMOILOVICH) HART 1964; 95 $\mu$ , 1289.00/5 (42/79.5).
- Fig. 15–16        *Jugasporites* sp.; 51  $\mu$ , 1383.55/2 (40.3/85.5).



**Tafel 11**

- Fig. 1 *Hamiapollenites* cf. *tractiferinus* (SAMOILOVICH) HART 1964; 95  $\mu$ , 1289.00/5 (42/79.5).
- Fig. 2 *Hamiapollenites* cf. *tractiferinus*; 98  $\mu$ , 1283.55/3 (31.3/76).
- Fig. 3–4 *Vittatina* sp. A; 45  $\mu$ , 1289.00/5 (43.4/94.4).
- Fig. 5–6 *Limitisporites* sp.; 53  $\mu$ , 1289.0/5 (36.4/71.7).
- Fig. 7–8 *Lunatisporites* sp.; 53  $\mu$ , 1289.0/5 (36.7/72.5).
- Fig. 9 *Jugasporites* sp.; 48  $\mu$ , 1275.30/4 (42.8/68.2).
- Fig. 10–11 *Vittatina* sp. A; 50  $\mu$ , 1274.30/3 (45/100.2).
- Fig. 12 *Lunatisporites* sp.; 145  $\mu$ , 1313.35/1 (32.3/84.7).
- Fig. 13–14 *Lunatisporites* sp.; 58  $\mu$ , 1350.30/4 (32.8/108).



**Tafel 12**

- Fig. 1–2            *Lunatisporites* sp.; 79  $\mu$ , 1374.30/2 (31.5/105.8).
- Fig. 3–4            *Vittatina costabilis* WILSON 1962; 46  $\mu$ , 1275.30/4 (35.2/72.3).
- Fig. 5–6            *Cycadopites* sp.; 48  $\mu$ , 1403.00/2 (36.5/91.8).
- Fig. 7–8            *Cycadopites* sp.; 60  $\mu$ , 1443.00/4 (40.5/70.8).
- Fig. 9                *Schopfipollenites* cf. *ellipsoides* (IBRAHIM) POTONIÉ & KREMP 1954; 203  $\mu$ , 1633.50/1 (37/66.5).
- Fig. 10             *Botryococcus* sp.; 42  $\mu$ , 1331.20/1 (31.8/94.3).
- Fig. 11             Pilz-Spore; 34  $\mu$ , 1256.09/5 (39.2/89.5).
- Fig. 12             Pilz-Spore; 10  $\mu$ , 1778.00/4 (34.2/87.3).



