APPENDIX A

INDETERMINANT SPOROMORPHS

This appendix contains figures of 75 indeterminant sporomorphs describing morphologically. The images came from the scanning electron microscope normally taken from two different magnifications. One shows normal shape and size and another one shows detail surface ornamentation. Some images from the light microscope are also presented. The scale bars used are ten microns except where otherwise stated.

1. BAN PA KHA

INDET-1

Plate XXXIII, figure 1, sample no. OB-3 (overburden unit).

Description: Grain is well rounded containing more or less twelve cells (polyad). Its size is about 20 microns with smooth surface in general. Each cell is more or less pentagonal shape about 8 microns size with a broadly dimple on the cell.

Occurrence: Rare from sample no. OB-3 of the overburden unit.

INDET-2

Plate XXXIII, figure 2, sample no. OB-3 (overburden).

Description: Grain is isopolar, prolate to subprolate, and tricolpate forms with about 15x20 microns in diameter. Colpi are long extending nearly reaching the poles. Surface sculpture is finely reticulate. Lumina of the reticulum are about 0.5 to 1.0 micron wide with low echinate muri.

Occurrence: abundant in the overburden unit.

INDET-3 and INDET-4

Plate XXXIII, figures 3 and 4, sample no. OB-3 (overburden).

Description: Grain is isopolar, prolate, and tricolpate forms with about 18x26 microns in diameter. Colpi are long extending nearly reaching the poles. Surface sculpture is scabrate.

Occurrence: abundant in the overburden unit.

INDET-5

Plate XXXIII, figure 5, sample no. OU-26 (overburden).

Remarks: Only one grain was found under scanning electron microscope. The real morphology is impossible to describe.

Occurrence: rare from sample OU-26.

2. NA SAI

INDET-6

Plate XXXIV, figure 1, sample no. NS-2.

Description: Grain is isopolar, subprolate to prolate, and tricolporate forms with about 18x22 microns in diameter. Colpi are long extending nearly reaching the poles. Surface sculpture is finely reticulate. Lumina of the reticulum are about 0.3 to 0.6 micron wide with echinate muri.

Occurrence: rare from the Na Sai.

INDET-7 and INDET-8

Plate XXXIV, figures 2 and 3, sample no. NS-2.

Description: Grain is isopolar, subprolate to prolate, tricolporate forms with about 20x27 microns in diameter. Colpi are wide at the equator where endopores present and tapering toward the poles but not reach the poles. Surface sculpture is reticulate. Lumina of the reticulum are about 0.3 to 1.5 microns wide with short baculate muri.

Occurrence: common from the Na Sai

INDET-9

Plate XXXIV, figure 4, sample no. NS-2.

Description: Grain is spheroid with about 21 microns in diameter. Pore is unseen or furrow is probably present. Surface sculpture is finely reticulate with spines covering the whole grain. Spines are conical shape with about 1 to 1.5 microns wide at bases and about 2 to3 microns long with acute to point rounded tips.

Occurrence: common from the Na Sai.

INDET-10

Plate XXXV, figure 1, sample no. NS-2.

Description: Grain is isopolar, subprolate to prolate, probably tricolporate forms with about 18x22 microns in diameter. Colpi are long nearly reaching the poles. Pores may present but not clear. Surface sculpture is reticulate. Lumina of the reticulum are about 1 to 1.5 microns wide with very short baculate muri.

Comparison: The grain looks similar to the extant pollen *Tectona grandis* of the family Labiatae but the fossil is a little bit smaller. The fossil and recent pollen have very close in surface ornamentation but muri of the fossil are sharp edges whist of the *Tectona grandis* are irregular rims.

Occurrence: rare from the Na Sai.

INDET-11

Plate XXXV, figure 2, sample no. NS-2.

Description: Grain is isopolar, prolate, and tricolporate forms with about 15x21 microns in diameter. Sculpture is reticulate with narrow muri about 0.2 micron wide. Lumina of the reticulum are about 1 to 2.5 micron wide with irregular shape.

Occurrence: common in the Na Sai.

INDET-12

Plate XXXV, figure 3, sample no. NS-2.

Description: Grain is isopolar, subprolate, tricolpate forms with about 28x36 microns in diameter. The cell body of the grain was possibly detached by some mechanisms retaining only meridional ridges. Sculpture varies from reticulate to foveolate depending on shape of lumina and width of muri. Broadly reticulate patterns cover the polar areas with about 0.8 to 1.0 micron wide lumina. The muri range from 0.3 to 0.7 micron wide. Foveolate patterns cover equatorial areas.

Comparison: Some features of this specimen may be referable to Early Cretaceous *Tricolpites favosus* Ward from Kansas, U.S.A. (Ward, 1986). The *Tricolpites favosus* is,

however, much smaller and the reticulate to foveolate sculptures are more uniform distribute.

Occurrence: rare from the Na Sai.

INDET-13

Plate XXXV, figure 4, sample no. NS-2.

Description: The grain is isopolar, subprolate, and tricolpate forms with about 10x12 microns in diameter. Surface sculpture is reticulate.

Occurrence: rare from the Na Sai.

3. MAE LONG

INDET-14

Plate XXXV, figure 5, sample no. ML-19.

Description: The grain is isopolar, subprolate, and tricolporate forms with 14x16 microns in diameter. Sculpturing is finely granulate.

Occurrence: rare from the Mae Long.

INDET-15

Plate XXXVI, figure 1, sample no. ML-17.

Description: The grain is spheroid with smooth surface. The size is about 30 to 35 microns. The grain probably contains three pores but only one pore visible from the figure. The pore is well rounded with about 3 to 4 microns in diameter. The rim of the pore is irregular.

Occurrence: rare from the Mae Long.

INDET-16

Plate XXXVI, figure 2, sample no. ML-19.

Description: The grain is oblate and triporate forms with circular outline in polar view. It is about 20 microns equatorial diameter with three well rounded pores in the equatorial area. The well- rounded pores are 2.5 microns in diameter with protruding at the rims of the pores about 1 micron thick and smooth surface. Surface sculpture is micropit or foveolate covering the whole grain.

Occurrence: rare from the Mae Long.

INDET-17

Plate XXXVI, figure 3, sample no. ML-19.

Description: The grain is oblate and triporate forms with circular outline in polar view. It is about 15 microns equatorial diameter with three pores in the equatorial area. The pores are unclear to describe. The surface sculpture is granulate in different sizes.

Occurrence: rare from the Mae Long.

INDET-18

Plate XXXVI, figure 4, sample no. ML-19.

Description: The grain is oblate with triangular outline in polar view with convex inter-apices. Pores are unclear and impossible to describe. Surface contains rod-like elements with not more than one micron long.

Occurrence: rare from the Mae Long.

4. CHIANG MUAN

INDET-19

Plate XXXVII, figure 1, sample no. LM-A-3.

Description: The grain is isopolar, subprolate, and tricolporate forms with about 13x16 microns in diameter. Sculpturing is irregularly granulate in different size.

Occurrence: rare from the sample LM-A-3.

INDET-20

Plate XXXVII, figure 2, sample no. LM-A-3.

Description: The grain was probably broken retaining a half grain. Sculpture is finely reticulate with spines covering the whole grain. Space between the spines is about 8 to 10 microns. The grain is about 23x50 microns in diameter.

Comparison: The grain may be broken being a half-grained body probably along the furrow of a monosulcate pollen. If it is an unbroken grain it compares well to *Spinizonocolpites* Muller on the basis of grain size and spine characteristics. However, there are many features differing from the fossil *Spinizonocolpites* and the recent palm pollen *Nypa fruticans*. This fossil form is probably a nypoid-type.

Occurrence: rare from the sample LM-A-3.

INDET-21

Plate XXXVII, figure 3, sample no. LM-A-3.

Description: Grain is isopolar and tricolporate forms with finely granulate surface sculpturing.

Occurrence: rare from the LM-A-3.

INDET-22

Plate XXXVIII, figure 1, sample no. LM-A-3.

Description: The grain used for describing here is considerable as a broken grain being a half-grained body. The grain is spheroid with size about 40 microns in diameter. Sculpture of the grain is granulate in different sizes with spines covering the grain. The spines are about 3 micron long with rounded ends. The grain has pores surrounding the grain, periporate.

Comparison: possibly Malvaceae.

Occurrence: Rare from sample LM-A-3.

INDET-23

Plate XXXVIII, figure 2, sample no. LM-A-3.

Description: The grain is isopolar, subprolate to prolate, and probably triporate forms having size about 18x23 microns. Sculpture is finely granulate. The spaces of the granule elements are about 0.5 to 1.5 microns.

Occurrence: rare from the LM-A-3.

INDET-24

Plate XXXVII, figure 3, sample no. LM-A-3.

Description: The grain is isopolar, spherical, and tricolporate forms with about 13 microns in diameter. The pores are well-rounded with protruding rims with finely reticulate sculpture on the grain surface.

Occurrence: rare from the LM-A-3.

INDET-25

Plate XXXVIII, figure 4, sample no. LM-A-3.

Description: The grain is about spherical, tricolporate forms with about 15 to 18 microns in diameter. Sculpture is striate covering the grain.

Comparison: General features are probably relatable to *Bauhinia purpurea* of the family Caesalpiniaceae but the extant species is much bigger in diameter.

Occurrence: rare from the LM-A-3.

INDET-26

Plate XXXVIII, figure 5, sample no. LM-A-3.

Description: It is isopolar, prolate, and tricolporate forms with about 20x30 microns in diameter. Colpi extend nearly covering the distance from the two poles but not reaching the poles. The grain may develops pseudocolpi but probably resulting from the grain collapse. Sculpture is broadly foveolar reticulate pattern.

Occurrence: rare from the LM-A-3.

INDET-27

Plate IXL, figure 1, sample no. LM-A-4.

Description: The grain is isopolar, prolate, and tricolpate forms with size about 13x23 microns in diameter. Sculpture is reticulate with microgranule inside the reticulum. The reticulum are about 0.2 to 1.0 microns in diameter. The muri of the reticulum wide at base and become narrow at top.

Occurrence: common to abundant from the lower coal zone.

INDET-28

Plate IXL, figure 2, sample no. LM-A-4.

Description: The grain is isopolar, prolate, and tricolporate froms with 15x25 microns in diameter. Sculpture is finely reticulate.

Occurrence: rare from the LM-A-4.

INDET-29

Plate IXL, figure 3, sample no. LM-A-4.

Description: The grain is spherical periporate form with about 20 microns in diameter. The pores are sunken with irregular rims. Sculpture is finely granulate.

Occurrence: rare from the LM-A-4.

INDET-30

Plate IXL, figure 4, sample no. LM-A-4.

Sees description on plate IXL, figure 1.

INDET-31

Plate XL, figure 1, sample no. LM-11.

Description: The grain is isopolar and prolate forms with 15x23 microns in diameter. Sculpture is striate extending from pole to pole..

Occurrence: Abundant from the lower coal zone.

INDET-32

Plate XL, figure 2, sample no. LM-A-6.

Description: The grain is isopolar, oblate, and tricolpate forms with about 13 microns in diameter. Colpi extend from pole to pole forming Y-marks on the polar view. Sculpture is scabrate.

Occurrence: Rare to common from the LM-A-6.

INDET-33

Plate XLI, figure 1, sample no. LM-A-4.

Description: Grain is isopolare, prolate, tricolporate forms with 17x23 microns in diameter. Colpi extend nearly reaching the poles. Sculpture is more or less reticulate with finely granulate on the muri.

Possible botanical affinity: Dipterocarpaceae.

INDET-34

Plate XLI, figure 2, sample no. LM-A-6.

Description: The grain is isopolar, prolate, tricolporate forms with 18x28 microns in diameter. Sculpture is scabrate.

Occurrence: rare from the LM-A-6.

INDET-35

Plate XLI, figure 3, sample no. LM-A-6; figure 4, sample no. LM-A-6.

Description: The grain is isopolar, sub-prolate to prolate, tricolporate forms with about 15x28 microns in diameter. Sculpture is coarsely reticulate and becoming finely reticulate or foveolate along colpi margins.

Occurrence: rare to common from the LM-A-6.

INDET-36

Plate XLI, figure 4, sample no. LM-A-6.

See description on plate IXL, figure 1.

Occurrence: common from the LM-A-6.

INDET-37

Plate XLII, figure 1, sample no. LM-A-6.

See description on plate IXL, figure 1.

Occurrence: common from the LM-A-6.

INDET-38

Plate XLII, figure 2, sample no. LM-A-6.

Description: The grain is isopolar, prolate, tricolpate forms with 12x20 microns in diameter. Colpi extend nearly reaching the poles. Sculpture is striate.

Occurrence: rare from the LM-A-6.

INDET-39 and INDET-40

Plate XLII, figure 3-4, sample no. LM-A-6.

See description on plate XLI, figure 2.

Occurrence: rare to common from the LM-A-6.

INDET-41

Plate XLII, figure 5, sample no. LM-A-6.

Description: The grain is isopolar, prolate, probably tricolporate forms with about 11x21 microns in diameter. Sculpture is reticulate.

Occurrence: rare to common from sample no. LM-A-6.

INDET-42

Plate XLIII, figure 1, sample no. LM-B-1.

Description: Grain is isopolar, subprolate, probably tricolporate forms with about 18x21 microns in diameter. Colpi extend nearly reaching the poles and pores are unclear to recognize. Sculpture is reticulate. Lumina of the reticulum are about 0.4 to 1.5 microns wide. Muri is baculate with about 0.2 to 0.3 microns thick with some microgranules on the muri.

Occurrence: Rare from sample no. LM-B-1.

INDET-43

Plate XLIII, figure 2, sample no. U1-4-B1.

Description: Grain is isopolar, subprolate, tricolporate forms with about 16x19 microns in diameter. Colpi are long with shorter pseudocolpi. Sculpture is scabrate to rugulate.

Occurrence: Common from sample no. U1-4-B1.

INDET-44

Plate XLIII, figure 3, sample no. U1-4-B1.

Description: Grain in this study is collapsed and impossible to reconstructed. Size of the grain is about 32 microns with reticulate sculpture. Pore or colpus is probably recognizable but unclear. The lumina of the reticulum is about 0.5 to 1.0 microns and becoming smaller toward the colpus margin or probably defined as foveolate. Muri is smooth.

Occurrence: Rare from sample no. U1-4-B1.

INDET-45

Plate XLIII, figure 4, sample no. U1-4-B1.

Remarks: This form is unclear to describe.

Occurrence: Rare from sample no. U1-4-B1.

INDET-46

Plate XLIV, figure 1, sample no. U1-4-B1.

Description: Grain is isopolare, subprolate, tricolporate forms with about 15x19 microns in diameter. Sculpture is striate to reticulate.

Occurrence: Rare from sample no. U1-4-B1.

INDET-47

Plate XLIV, figure 2, sample no. U1-4-B1.

Description: Grain is isopolar, prolate, tricolpate forms with 12x21 microns in diameter. Colpi extend nearly reaching the poles. Sculpture is granulate to reticulate with small lumina.

Occurrence: Common from sample no. U1-4-B1.

INDET-48

Plate XLIV, figure 3, sample no. U1-4-B1.

See description on plate XLIII, figure 2.

Occutrrence: common from the U1-4-B1.

INDET-49

Plate XLIV, figure 4, sample no. U1-4-B1.

Description: The grain is isopolar, subprolate, tricolpate forms with about 11x16 microns in diameter. Sculpture is reticulate. Lumina of the reticulum range from 0.2 to 0.6 microns wide. Muri is about 0.3 to 0.4 microns thick.

Occurrence: common from the upper coal zone.

INDET-50

Plate XLIV, figure 5, sample no. U1-4-B1.

Description: The grain is isopolar, spherical, tricolporate forms with about 18 microns in diameter. Sculpture is reticulate. The reticulum is formed by the ridges or muri that crisscrossed up and down. Covering the grain.

Comparison: The features of the fossil resemble the features of the extant *Bauhinia saccocalyx*, Caesalpiniaceae. Some other features may be resemble the *Bauhinia saccocalyx* and need more check.

Occurrence: rare from the U1-4-B1.

INDET-51

Plate XLIV, figure 6, sample no. U1-4-B1.

Sees description on plate XXXVII, figure 3.

Occurrence: Rare from sample no. U1-4-B1.

INDET-52

Plate XLV, figure 1, sample no. U1-4-B1.

Description: The grain is isopolar, subprolate, probably tricolporate forms with about 18x20 microns in diameter. The grain is trilobes with short colpi containing pores. Sculpture is striate to reticulate covering the whole grain.

Occurrence: rare from the U1-4-B1.

INDET-53

Plate XLV, figure 2, sample no. U1-4-B1.

Description: The grain is isopolar, prolate, tricolporate forms with about 12x20 microns in diameter. Sculpture is striate.

Occurrence: rare from the U1-4-B1.

INDET-54

Plate XLV, figure 3, sample no. U1-4-B1.

Description: The grain is isopolar, prolate, tricolporate forms with about 8x13 microns in diameter. Sculpture is scabrate.

Occurrence: rare from the U1-4-B1.

INDET-55

Plate XLV, figure 4, sample no. U1-4-B1.

Description: The grain is isopolar, spheroid, tricolporate forms with about 17 microns in diameter. Sculpture is coarsely reticulate on the intercolpi regions and becoming coarsely foveolar reticulate along the colpus margins and polar areas.

Occurrence: rare from the U1-4-B1.

INDET-56

Plate XLV, figure 5, sample no. U-2(u).

Remarks: This form is so far indescribable. It is probably an element of alga or fungus. More comparison is needed.

5. MAE MOH

INDET-57

Plate XLVI, figure 1, sample no. I-2.

Description: It is a trilete spore with about 39 microns in diameter. Sculpture is smooth.

Comparison: This form resembles the form of *Psilatriletes* sp. or probably *Cyathidites* sp., family Cyatheaceae.

Occurrence: abundant from the I-2.

INDET-58

Plate XLVI, figure 2, sample no. K-7.

Sees description on plate XXXVII, figure 3.

Occurrence: Rare from sample no. K-7.

INDET-59

Plate XLVI, figure 3, sample no. K-7.

Description: The grain is unclear to describe.

Occurrence: rare from the K-7.

INDET-61 and INDET-62

Plate XLVII, figure 1 and 2, sample no. K-7.

Description: The grain is isopolar, subspherical, tricolporate forms with about 19x20 microns in diameter. Prominent colpi extends nearly covering the grain from pole to pole and some grain reaching the poles forming Y-marks in the polar views. Sculpture is reticulate.

Comparison: The colpi, pore structure, and sculpture resemble the extant *Oroxylum indicum*, Bignoniaceae, but the extant species is much bigger in size, about 60x80 microns.

Occurrence: rare to common from the K-7.

6. MAE LAMAO

INDET-63

Plate XLVII, figure 3, sample no. MLM-1-6.

Description: The grain is heteropolar, spherical, periporate forms with about 22 micron in diameter. Sculpture is densely micro-verrucate, the verrucae is about 0.1 micron size. There are about 17 to 21 pores around the grain with irregular pore margin. The pores are sunken.

Occurrence: rare from the MLM-1-6.

INDET-64

Plate XLVII, figure 4, sample no. MLM-1-6.

Description: The grain is oblate with more or less triangular outline and convex inter-apices. The grain shows depressed Y-mark on the proximal surface with verrucate sculpture covering the grain. The size is about 10 to 11 microns.

Occurrence: rare from the MLM-1-6.

7. NA HONG

INDET-65 and INDET-66

Plate XLVII, figures 5 and 6, sample no. NH-19.

Description: The grain is isopolar, prolate, and probably tricolpate forms with about 7x10 to 9x13 microns in diameter. Colpi are well defined with distinctive pseudocolpi developed. Sculpture is reticulate. Lumina of the reticulum are irregular in size and shape with thin muri.

Occurrence: common to abundant from the *Inaperturopollenites dubius* Zone.

INDET-67

Plate XLVII, figure 7, sample no. NH-19.

Description: The grain is isopolar, prolate, and tricolpate forms with about 7x12 microns in diameter. Colpi are well defined developing into trilobes in the polar view. Exine layer is about 1.5 to 2 microns thick. Sculpture is smooth.

Occurrence: common from the *Inaperturopollenites dubius* Zone.

INDET-68

Plate XLVII, figure 8, sample no. NH-1.

Description: Grain is isopolar, subprolate, tricolporate forms with about 11x13 microns in diameter. Sculpture is scabrate. Exine is about 1 micron thick.

Occurrence: Rare from the NH-1.

INDET-69 and INDET-70

Plate XLVII, figure 9-10, sample no. NH-19 and NH-24 respectively.

Description: Grain is isopolar, subprolate, and tricolporate froms with about 10x12 microns in diameter. The grain is tapered toward the poles. Colpi are well defined with rounded pores in the equatorial area. Sculpture is finely reticulate.

Occurrence: Common to abundant from the NH-19 and NH-24.

INDET-71

Plate XLVIII, figure 1, sample no. NH-24.

Description: Grain is isopolar and tricolpate forms with about 20 microns in diameter. Sculpture is finely striate.

Occurrence: Rare from the NH-24.

INDET-72 and INDET-73

Plate XLVIII, figure 2-3, sample no. NH-24.

Description: Grain is isopolar, spherical, and tricolpate forms with about 16 microns in diameter. Sculpture is smooth. Exine is about 1.5 to 2 microns thick at the inter-apices and thinner toward the colpi margins.

Occurrence: Common from the NH-24.

INDET-74

Plate XLVIII, figure 4, sample no. NH-21.

Description: Grain is isopolar, subprolate to prolate, and tricolpate forms with about 14x20 microns in diameter. Sculpture is smooth. Exine is about 1.5 microns thick.

Occurrence: Common from the NH-21.

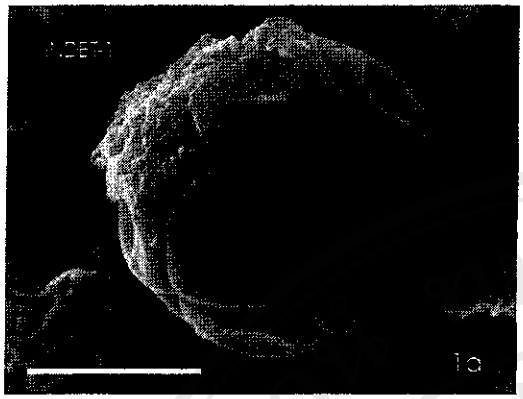
INDET-75

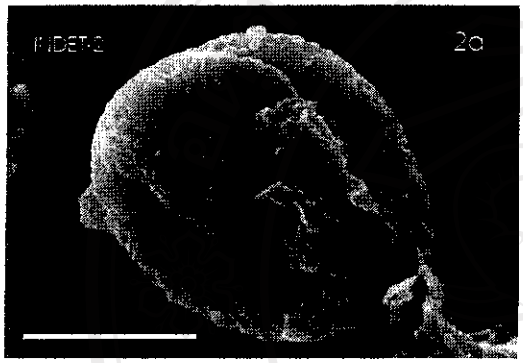
Plate XLVIII, figure 5, sample no. NH-21.

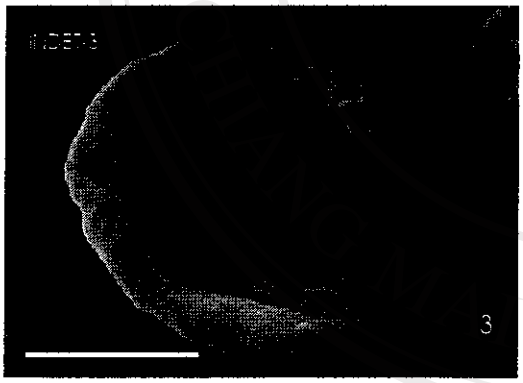
Description: Grain is isopolar, prolate, and tricolporate forms with about 10x18 microns in diameter. Sculpture is smooth to scabrate. Exine is about 0.8 to 1.0 micron thick.

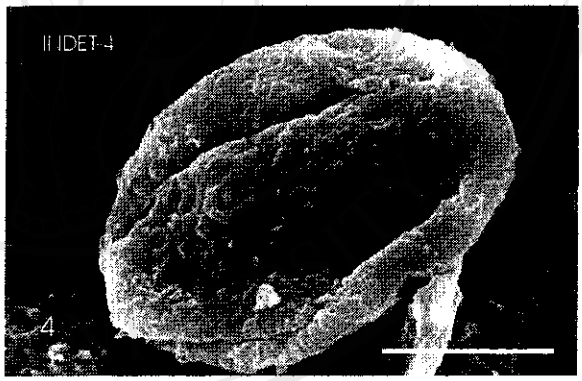
Occurrence: Common from the NH-21.

PLATE XXXIII









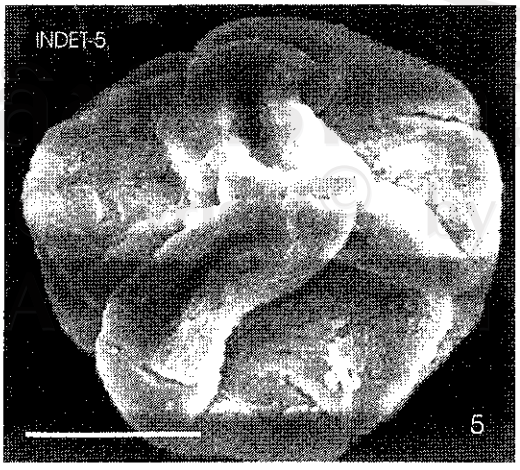
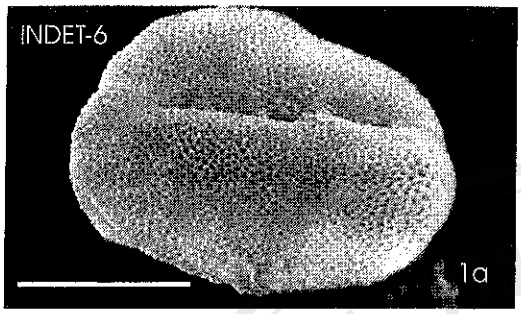
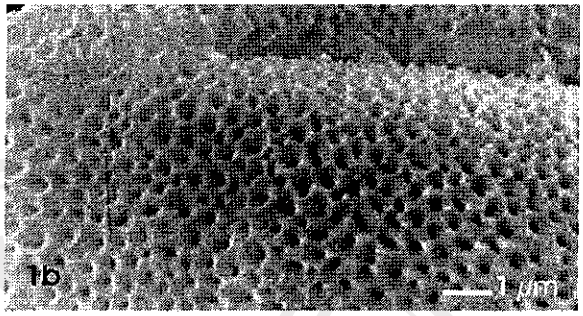
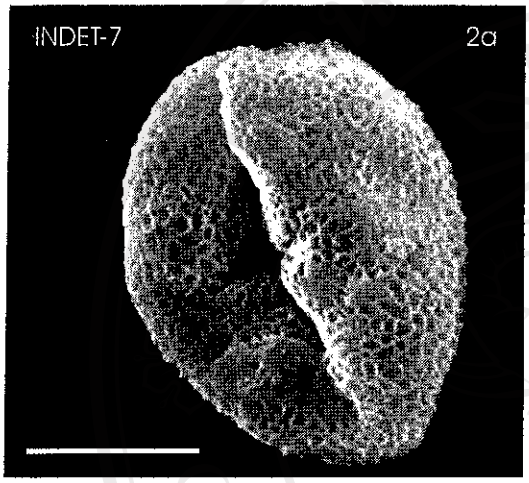
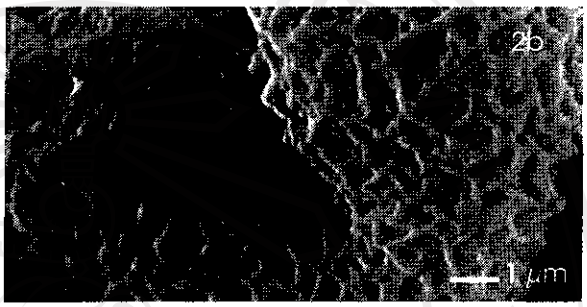


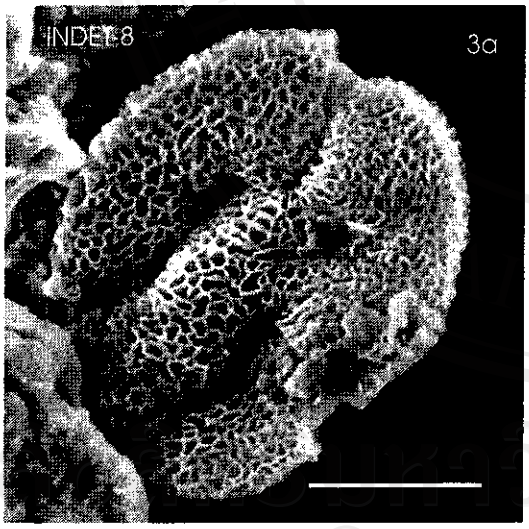
PLATE XXXIV

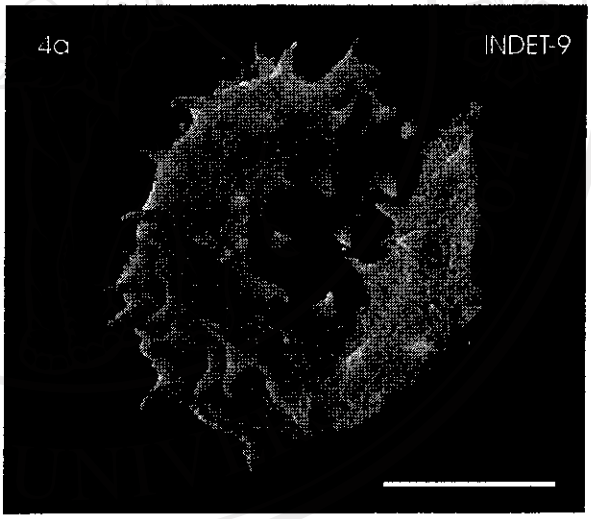


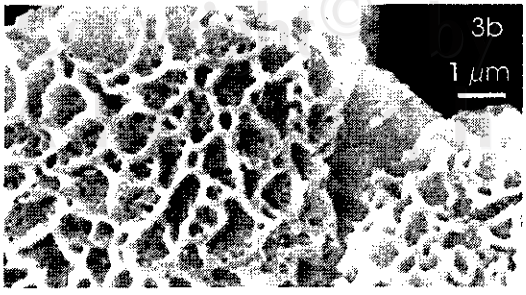












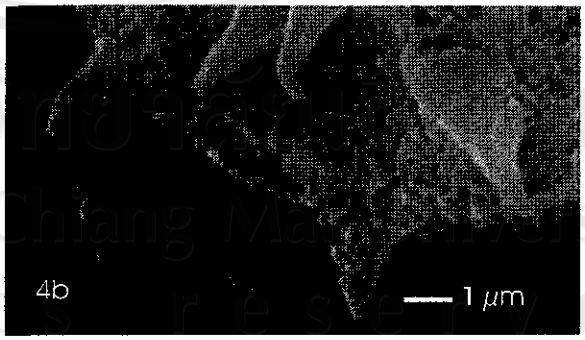
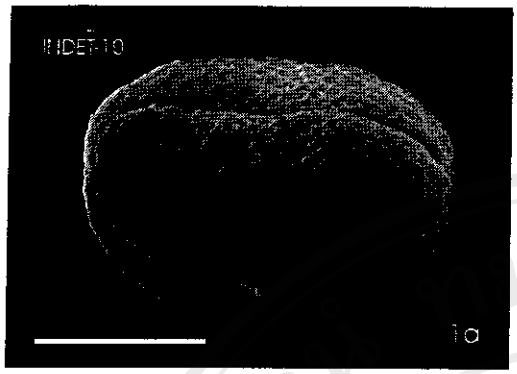
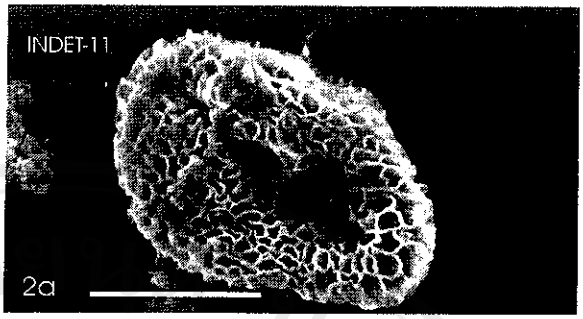
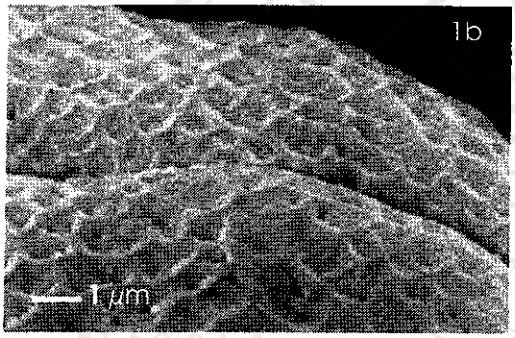
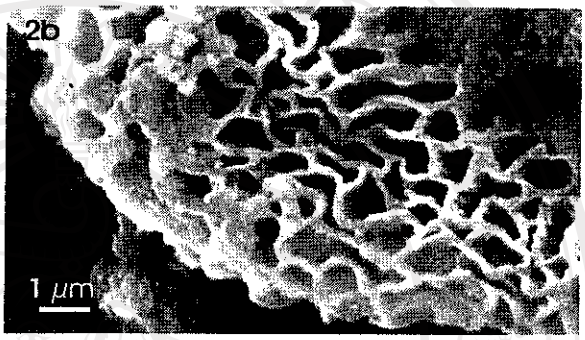


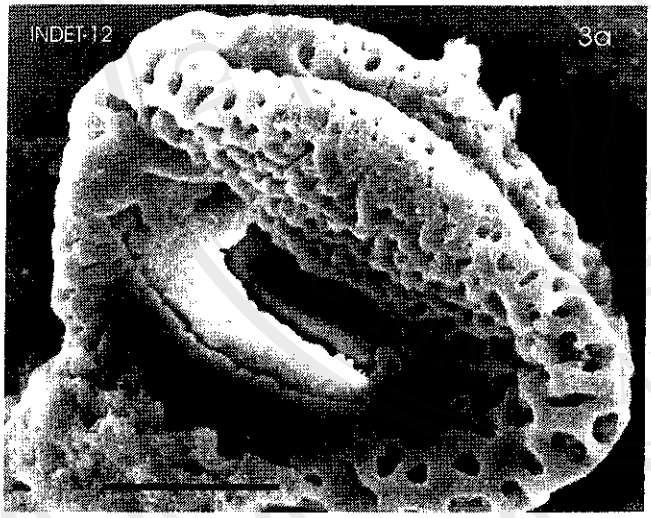
PLATE XXXV

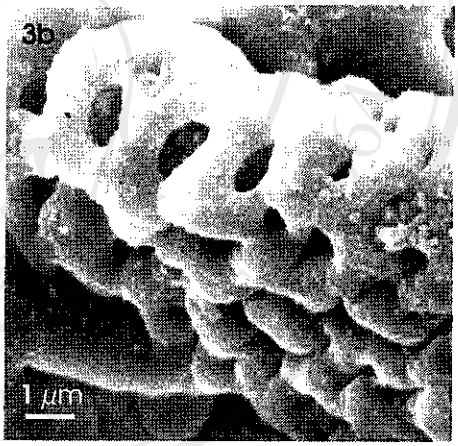


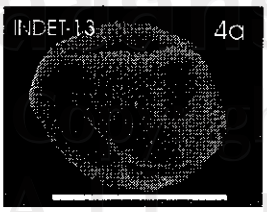












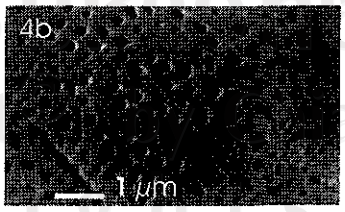
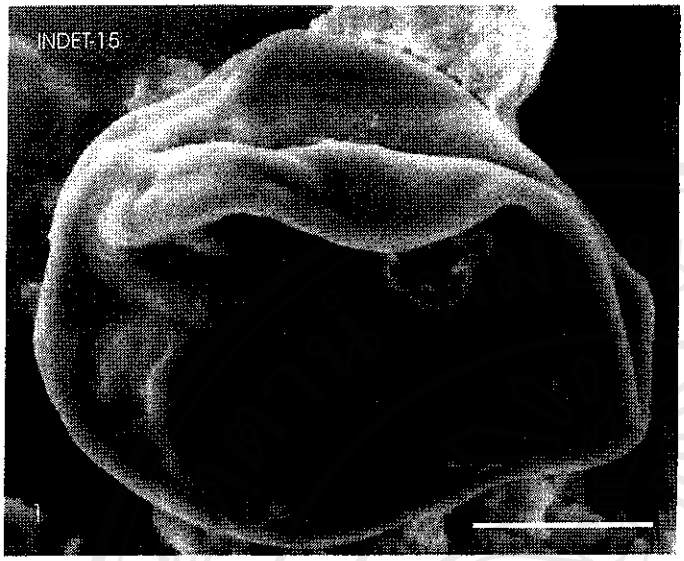
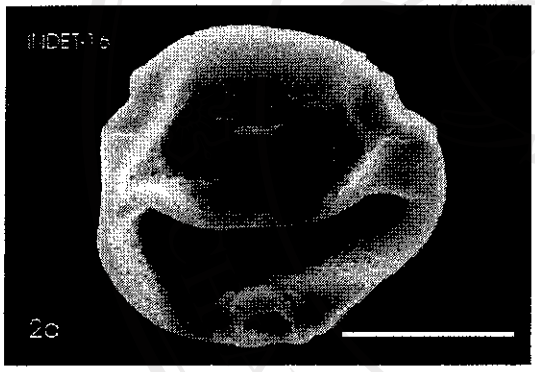
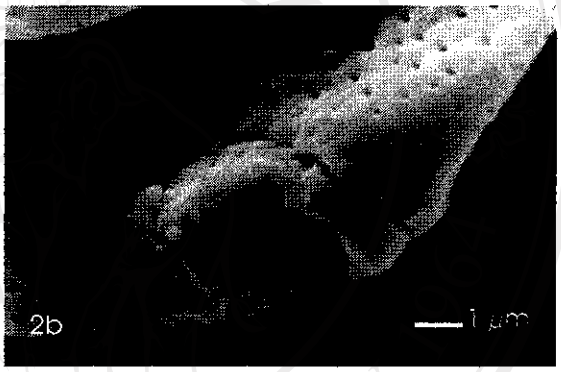
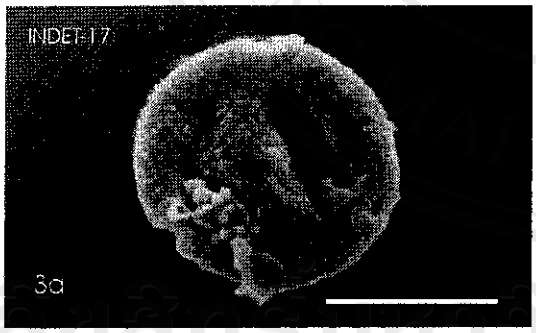


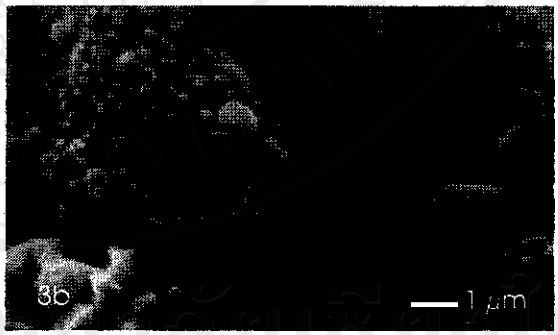
PLATE XXXVI











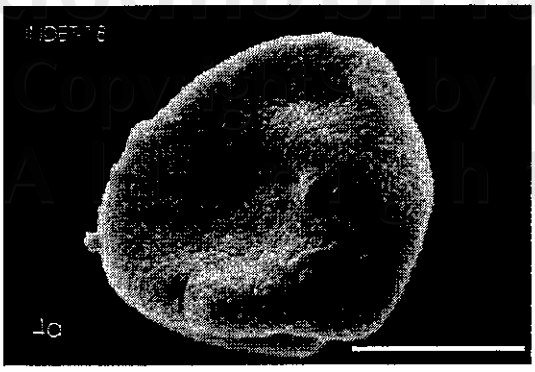
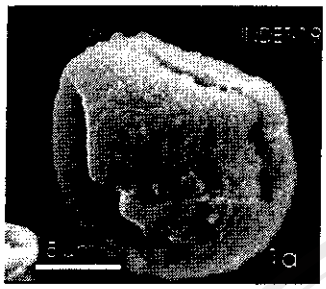
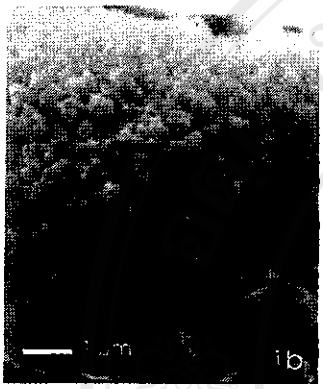
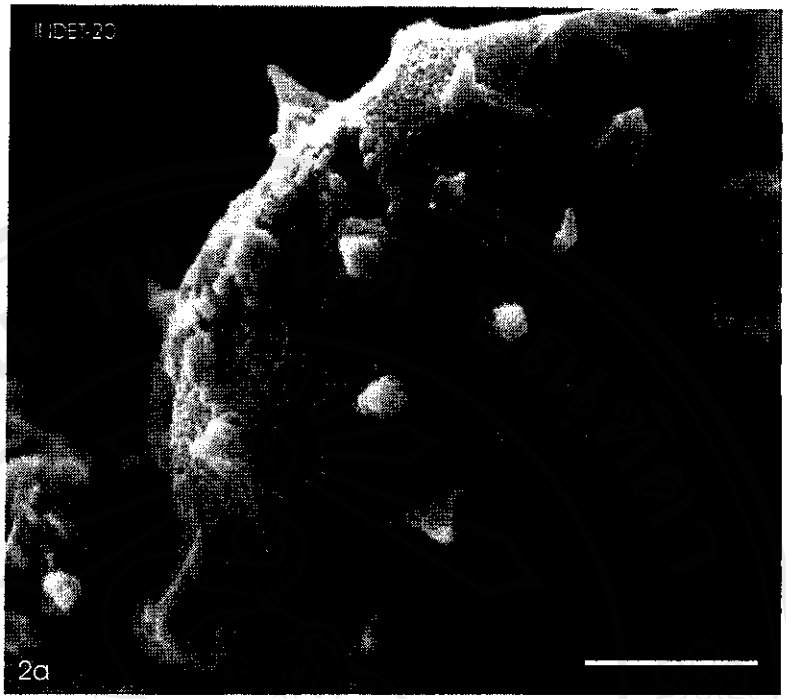
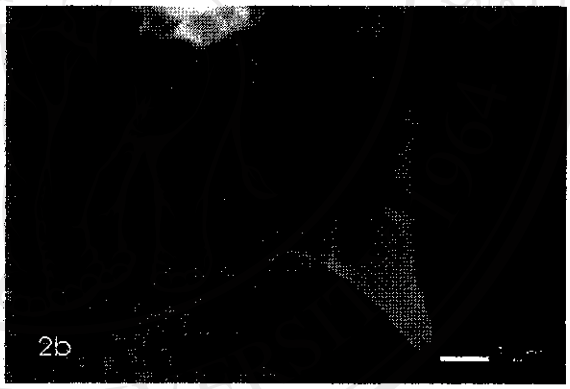


PLATE XXXVII









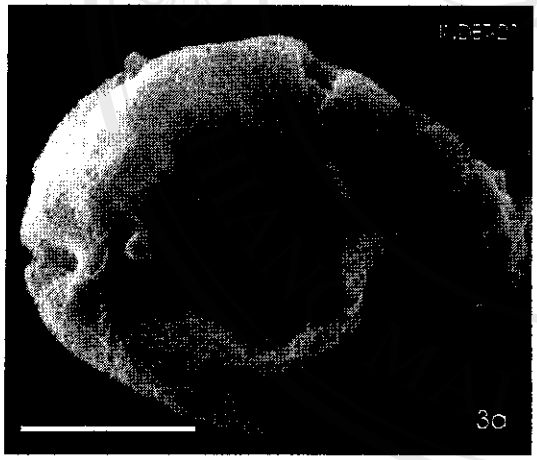


PLATE XXXVIII

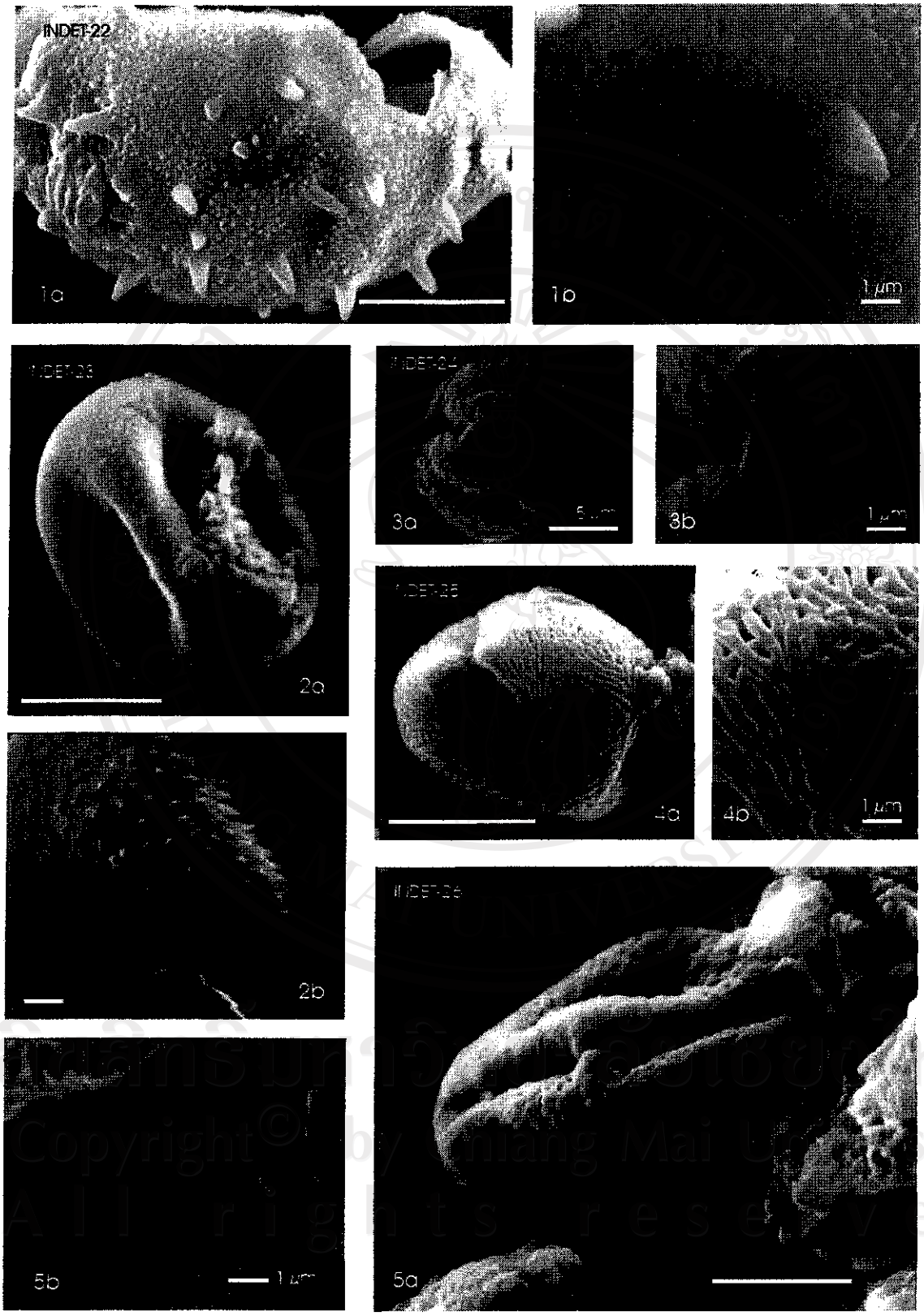
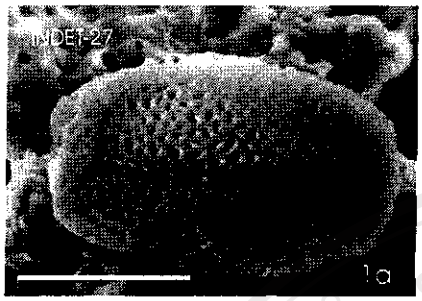
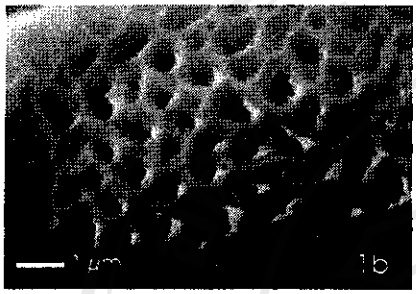
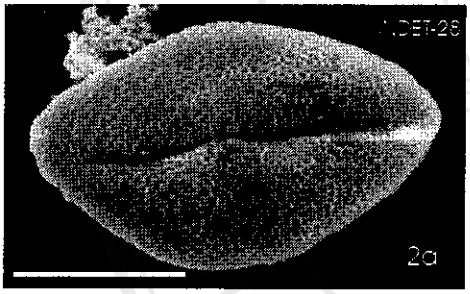
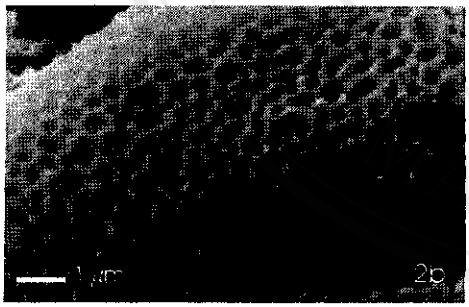


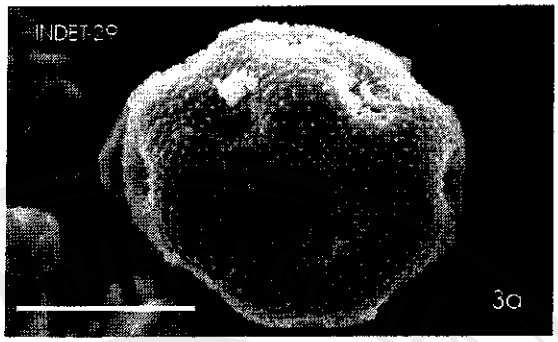
PLATE IXL

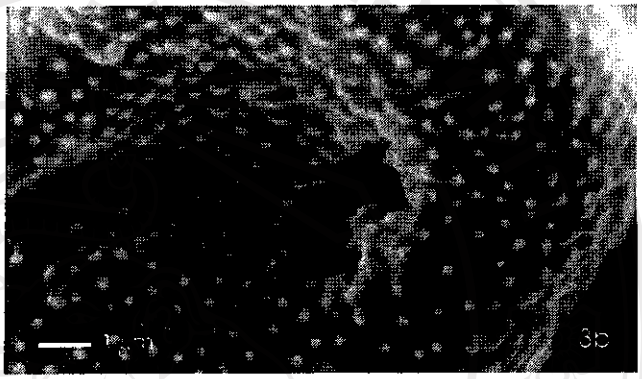












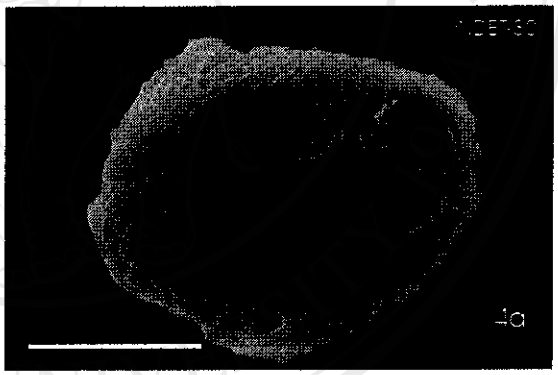
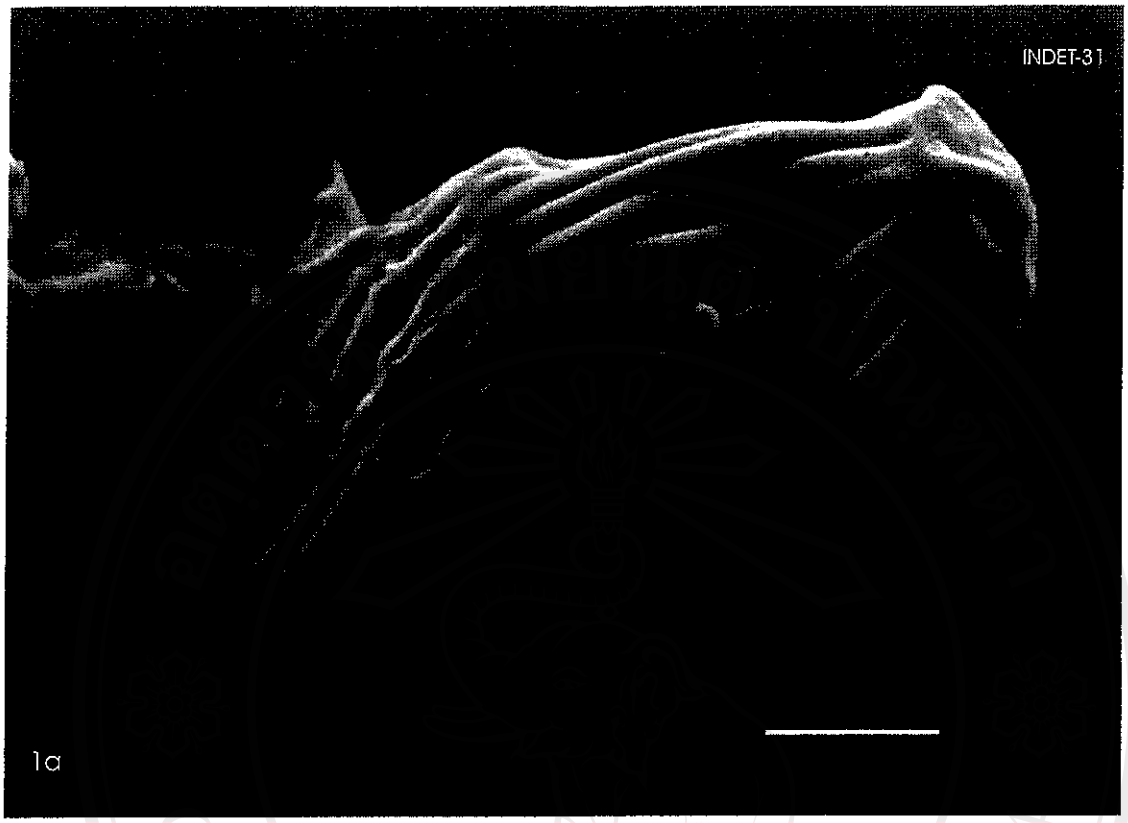


PLATE XL



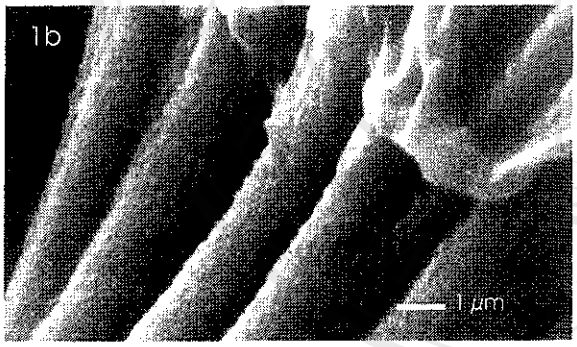
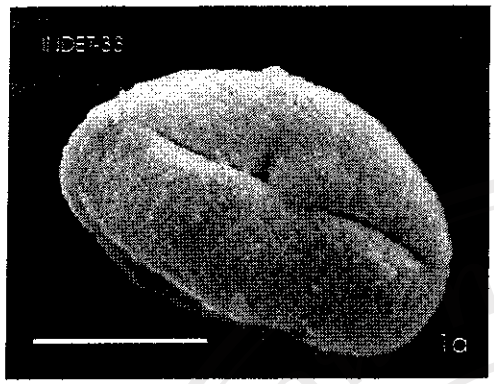
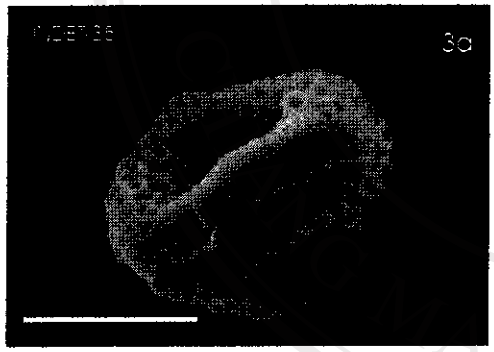
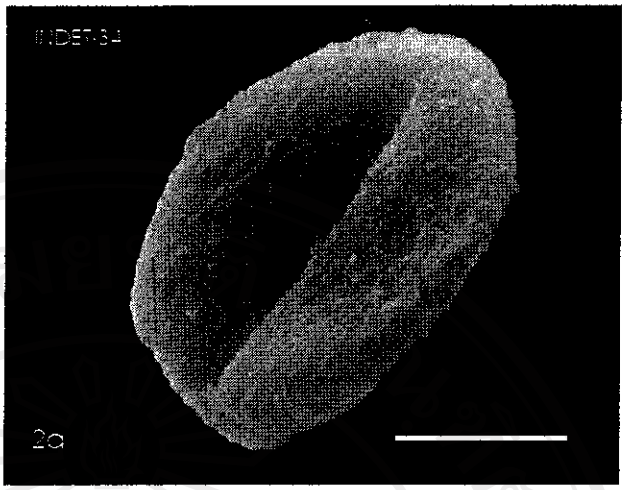
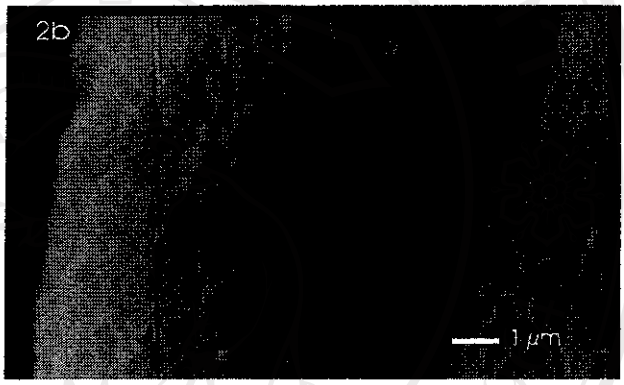


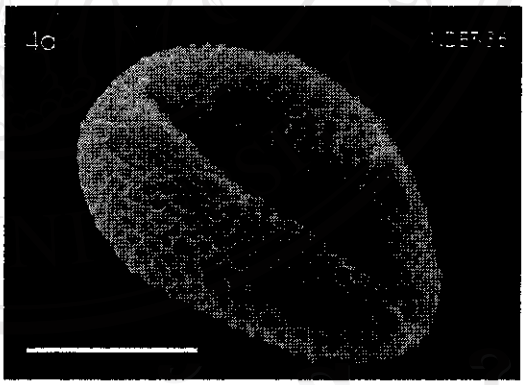
PLATE XLI











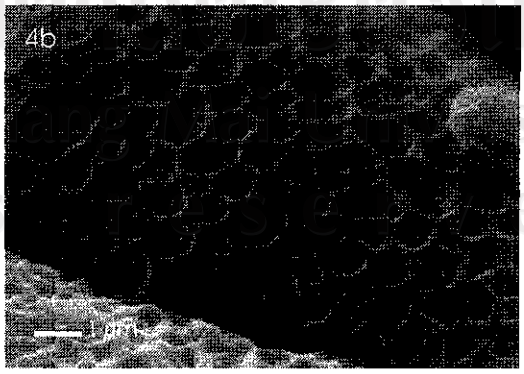
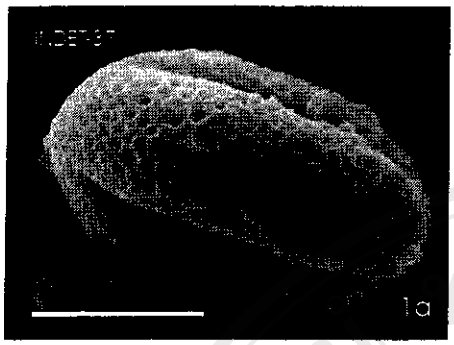
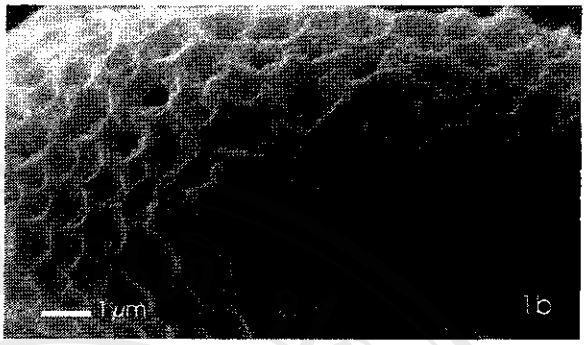
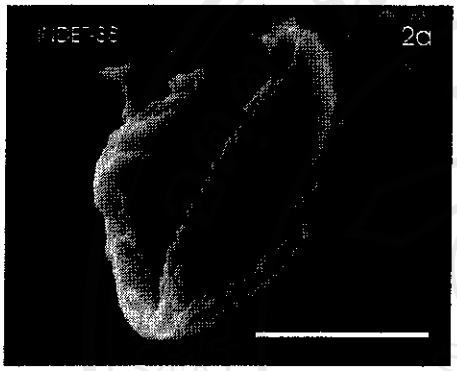
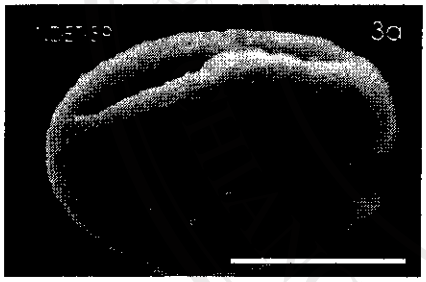


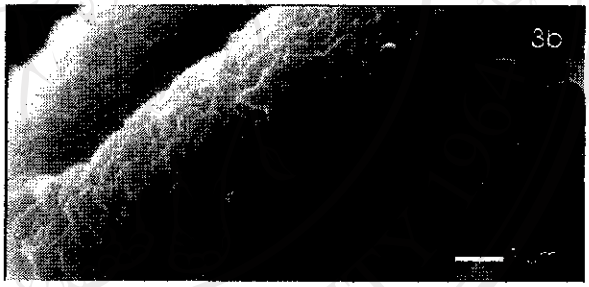
PLATE XLII

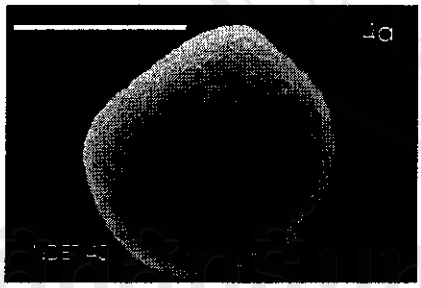


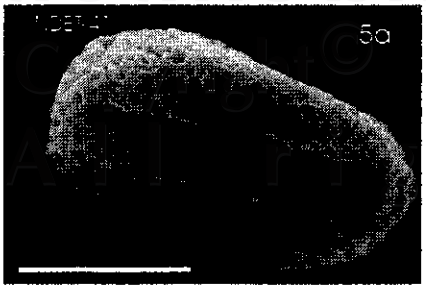












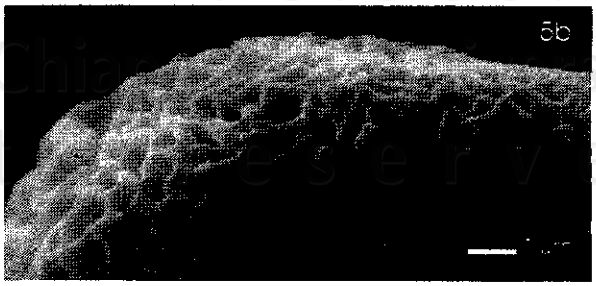
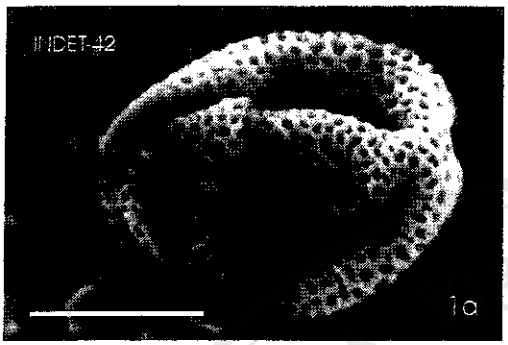
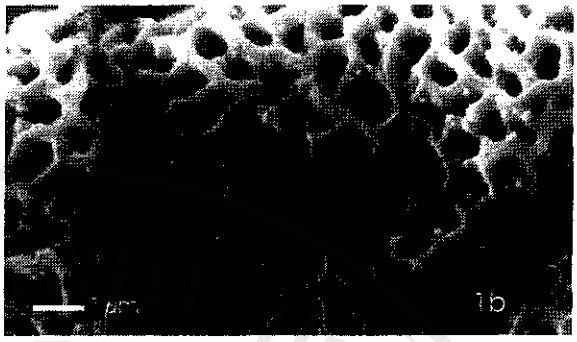
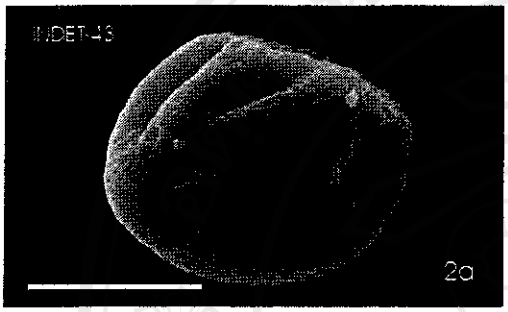
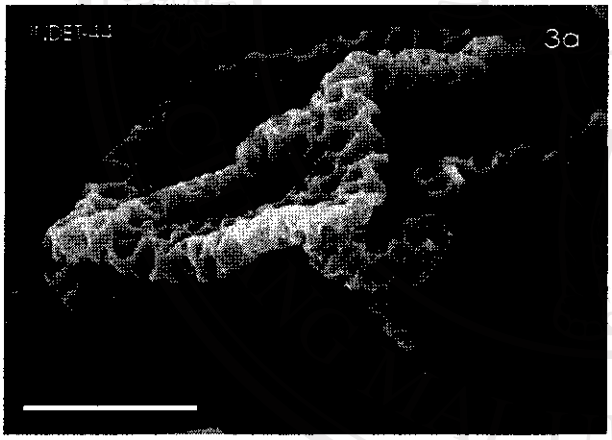


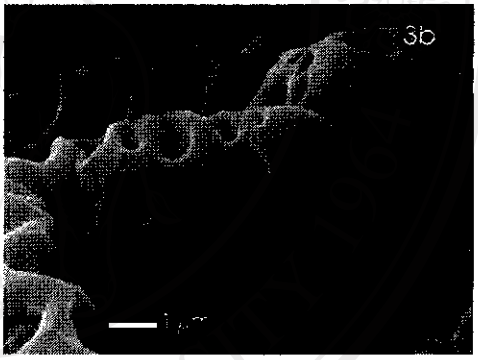
PLATE XLIII

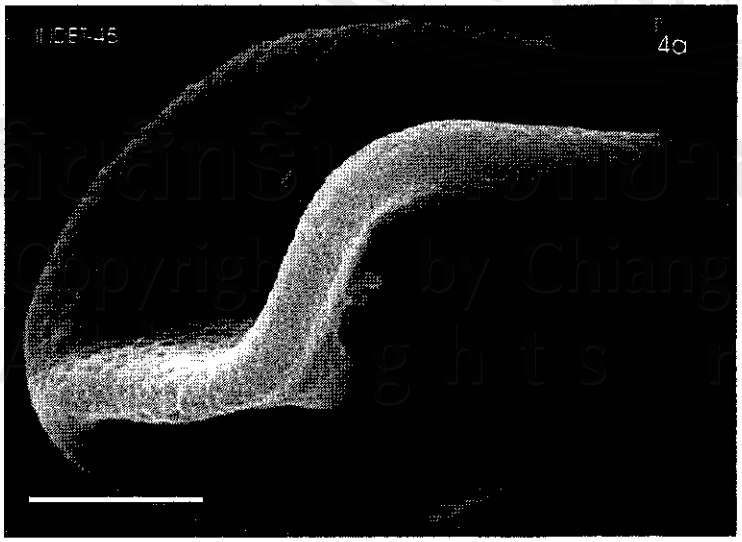


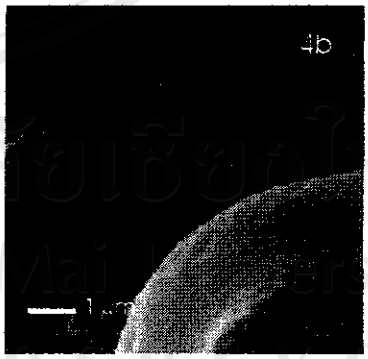












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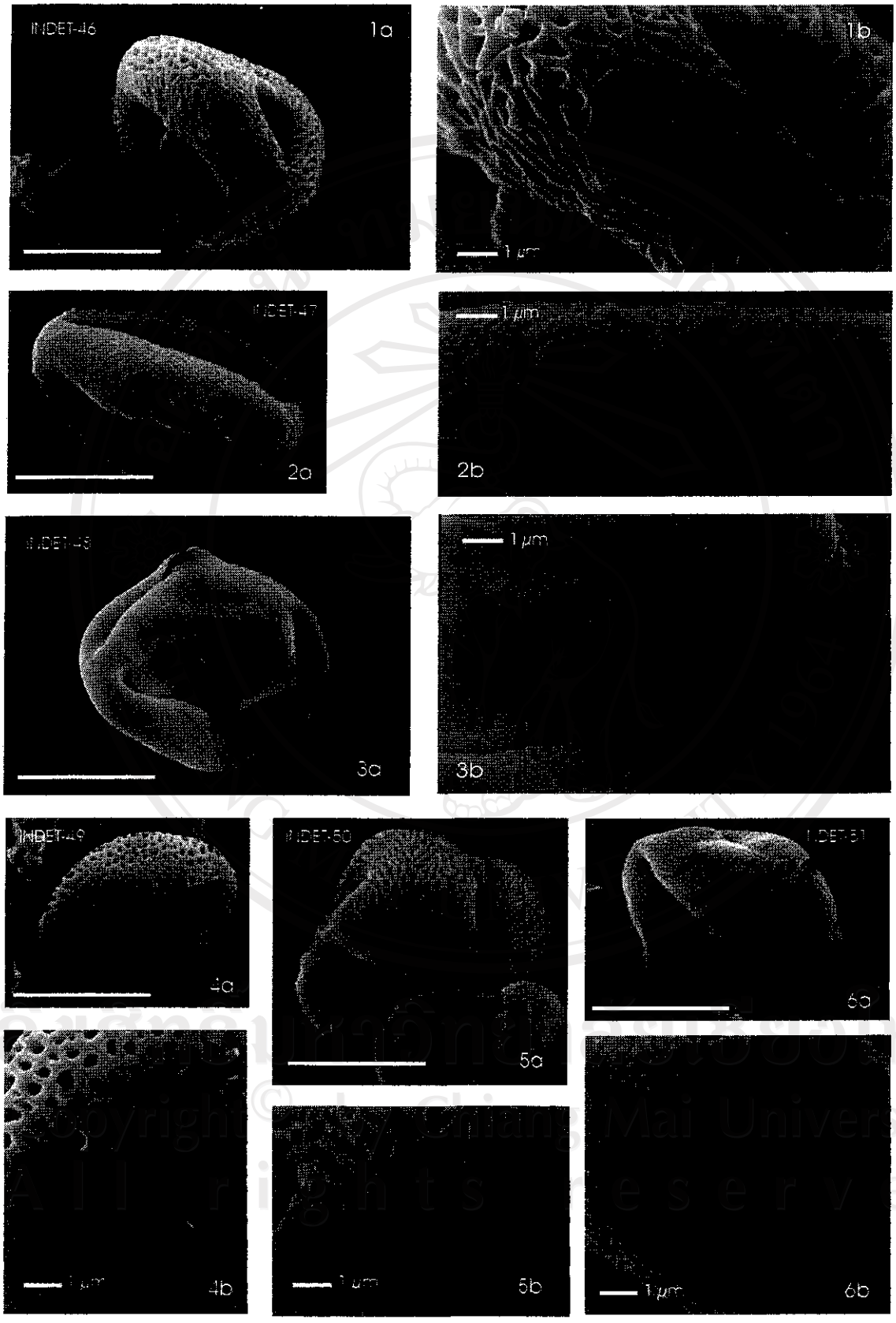


PLATE XLV

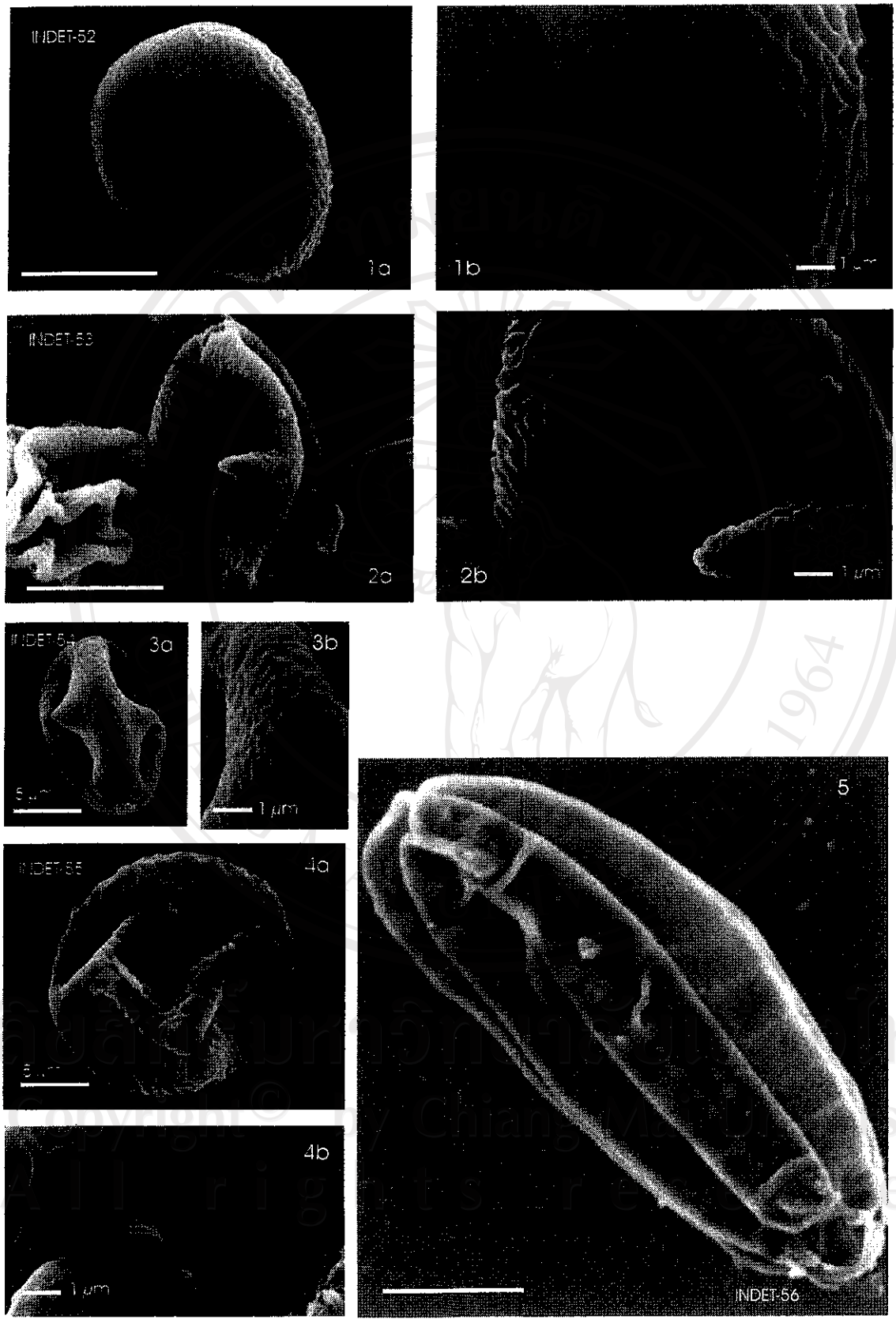
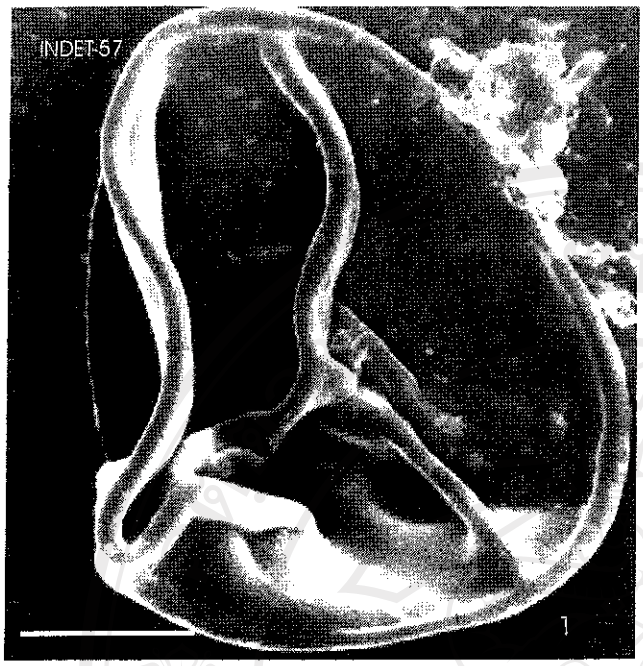
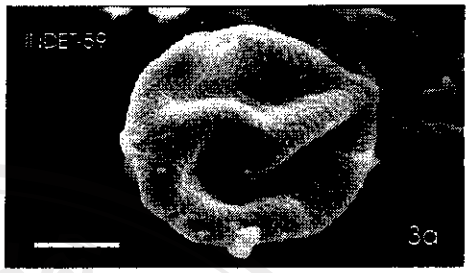
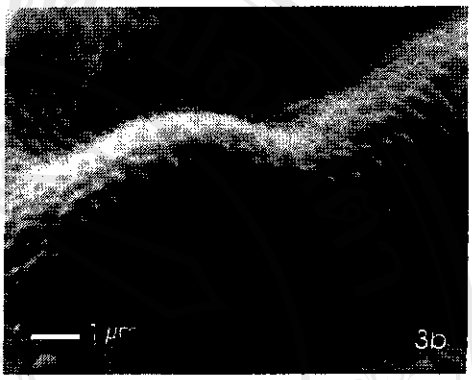
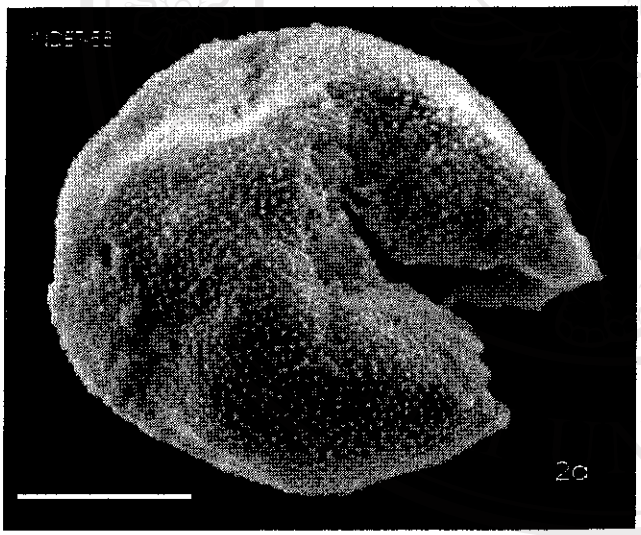


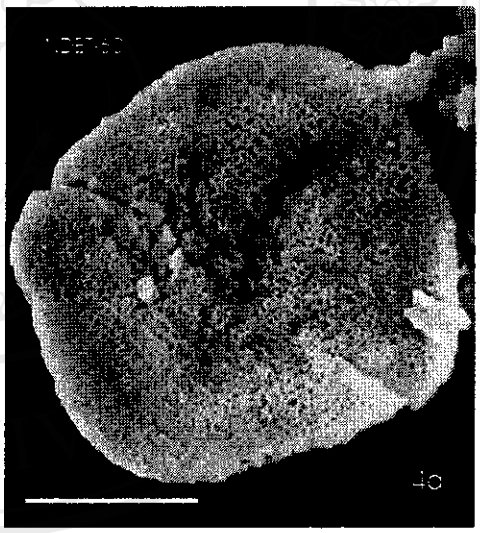
PLATE XLVI

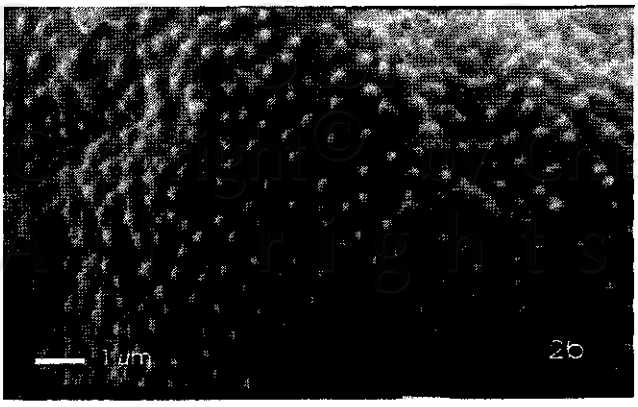


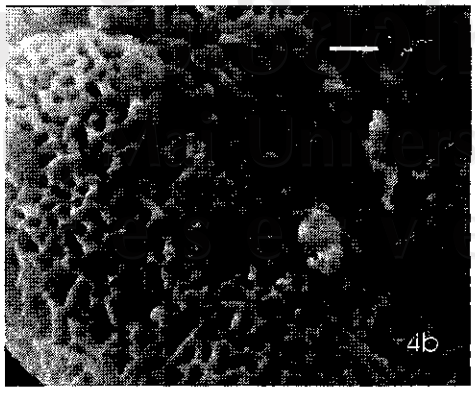












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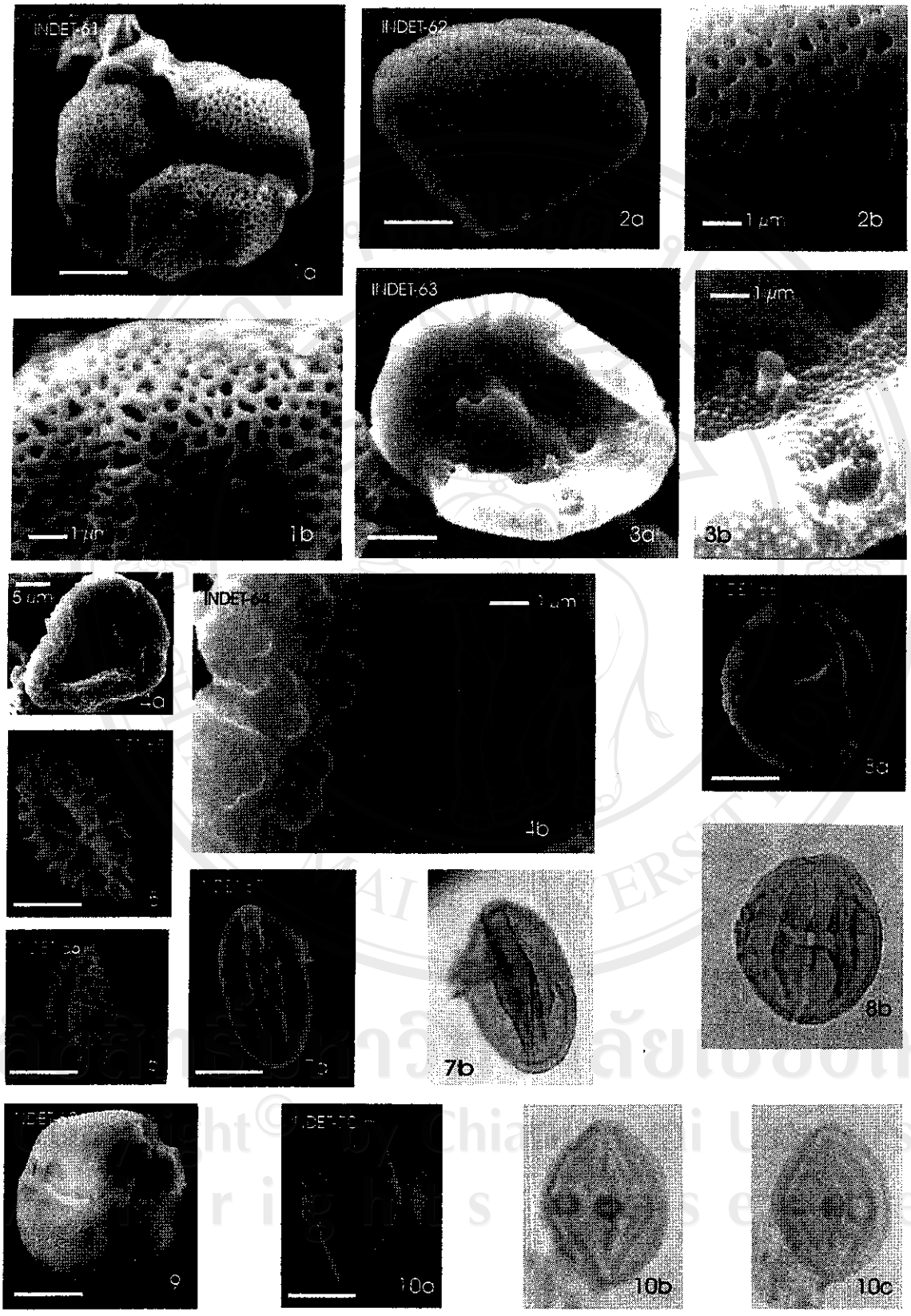
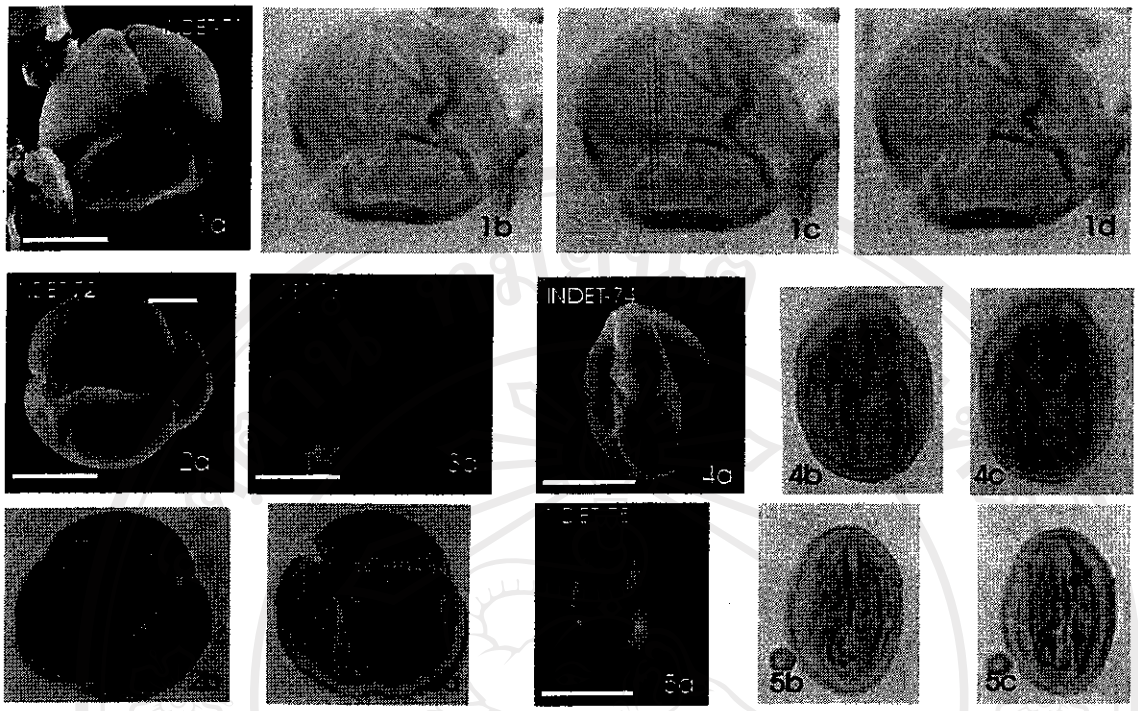


PLATE XVVIII



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Petroleum Concession Fund, Department of Mineral Resources	1998-2000
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Office of Accelerated Rural Development	Hydrogeology, Geophysics	1985-1993
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PUBLICATIONS:

Watanasak, M., Songtham, W., and Mildenhall, D.C. 1995. Age of the Susan Hoi (Shell fossil cemetery) Krabi basin, southern Thailand. *Mahidol University Journal*, 2(2): 177-187.

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