

## Glossary

Else C. VELLINGA

- abrupt papilla* – (on pileus) (Fig. 29.30).
- abruptly bulbous* – (base of stipe) (Fig. 31.18).
- acrophysalidic* – (tissue) consisting of connective hyphae and abundant, large, terminal, inflated elements ('acrophysalides').
- acuminate* – (cystidia) tapering from inwardly curved sides off to a point (Fig. 34.39).
- acute* – (cystidia) tapering off to a sharp point (Fig. 34.40); – (spore apex) pointed (Fig. 33.30).
- acute papilla* – (on pileus) (Fig. 29.31).
- adnate* – (lamellae) broadly attached to stipe (Fig. 30.21), see also narrowly adnate.
- adnexed* – (lamellae) rounded towards stipe (Fig. 30.19).
- allantoid* – (spores) with adaxial side concave and parallel to abaxial side (Fig. 33.21).
- amygdaliform* – (spores) with adaxial side, straight or less convex than abaxial side (Fig. 33.18, 33.19).
- amyloid* – (spore wall, spore ornamentation, hyphal walls), staining greyish to blackish blue in Melzer's reagent.
- anastomosing* – (lamellae) provided with irregular transverse connections (Fig. 30.4).
- angiocarp* – a type of development of the basidiocarp in which at some stages the developing hymenium is situated in a closed cavity; see also primary and secondary angiocarp.
- apex* – (of spores) summit (Fig. 32.4A).
- apical* – (spores) situated at the tip.
- appendage* – (of spores) see hilar appendage.
- appendiculate* – (margin of pileus) with small appendages (Fig. 29.48).
- applanate* – (pileus) flattened, flat (Figs 29.7, 29.19).
- arachnoid* – (pileus and stipe, surfaces or velum) cobwebby.
- arcuate* – (lamellae) with concave lamella edge (Figs 30.15, 30.16).
- areolate-rimose* – (pileus surface) marked with numerous superficial clefts or cracks forming angular patches.
- ascending* – (hyphae) curving upward.
- aseptate* – (hyphae) without septa.
- bacilliform* – (spores)  $l/w = l/b > 3.0$  (Fig. 33.7).
- balistosporic basidium* – a basidium that actively discharges its spores.
- basidiocarp* – fruit-body producing spores on basidia.
- bilateral* – see divergent.
- binding hyphae* – branching, rarely septate, thick-walled, narrow hyphae binding the other elements of a tissue together.
- binucleate* – with two nuclei.
- breadth* – (of spore), largest distance between sides as seen from frontal view (Fig. 32.2).
- broadly clavate* – (cystidia) clavate with  $Q < 1.5$  (Fig. 34.14).
- broadly conical* – (pileus) (Fig. 29.13), see also truncately broadly conical; – (cystidia) conical with  $Q < 1.5$  (Fig. 34.18).
- broadly cylindrical* – (cystidia) cylindrical, with  $Q < 2$  (Fig. 34.11).
- broadly ellipsoid* – (spores)  $l/w = l/b = 1.15-1.3$  (Fig. 33.3); – (cystidia)  $Q = 1.15-1.3$  (Fig. 34.3).
- broadly fistulose* – (stipe) with very wide tube (Fig. 31.12).
- broadly fusiform* – (spores) fusiform with  $l/w$  or  $l/b = 1.5-2.0$  (Fig. 33.12); – (cystidia) fusiform with  $Q = 1.5-2.0$  (Fig. 34.21), see also very broadly fusiform.
- broadly lageniform* – (cystidia) (Fig. 34.26).
- broadly utriform* – (cystidia) (Fig. 34.29).
- broadly ventricose* – (lamellae) (Fig. 30.14).
- brosse* – see en brosse.
- bulbous* – (base of stipe) enlarged (Fig. 31.17), see also abruptly bulbous and marginately bulbous.
- campanulate* – (pileus) bell-shaped (Fig. 29.12).
- capitate* – (apex of cystidia) having a distinct and abrupt knob (Fig. 34.44).
- caulocystidium* – cystidium situated on surface of stipe.
- central* – (stipe) attached to centre of pileus (Fig. 31.1); – (germ pore) situated at the central tip of the spore (Fig. 33.27).
- chambered* – (stipe) with several cavities (Fig. 31.13).
- cheilocystidium* – cystidium situated on edge of lamella or tube.
- chryso-cystidium* – cystidium with yellow amorphous body or bodies in contents after treatment with  $NH_4OH$  or  $KOH$ .
- circular* – (pileus) round (Fig. 29.1).
- clavate* – club-shaped (stipe) (Fig. 31.8); – (cystidia),  $Q = 1.5-4$  (Fig. 34.13), see also narrowly clavate and broadly clavate.
- clitocyboid* – see omphalioid.
- collarium* – a tube around, but free from, the apex of the stipe to which the lamellae are attached (Fig. 30.5).
- colliculose* – (pileus surface) covered with hillock-like elevations.
- collybioid* – (habit) characterized by pileus neither umbilicate, nor conical; lamellae free or adnate; context tough; context of pileus continuous with context of stipe (Figs 28.2, 28.3).
- concave* – (pileus) (Fig. 29.21).
- congoophilus* – (spore wall) accumulating Congo Red.
- conical* – cone shaped (pileus) (Fig. 29.14), see also broadly conical and narrowly conical, truncately broadly conical, truncately conical, and obtusely conical; – (cystidia)  $Q = 1.5-4$  (Fig. 34.17), see also narrowly conical and broadly conical.
- connate* – (stipes) grown together at their bases.
- connective hyphae* – usually narrow undifferentiated hyphae of the context of a basidiocarp connecting all other elements (used in opposite of fundamental hyphae).
- constriction* – see median constriction.
- convex* – (pileus) (Fig. 29.9).
- costate* – (pileus and stipe surfaces) with ridges.
- crenate* – with rounded teeth (margin of pileus) (Fig. 29.45); – (lamella edge) (Fig. 30.33).
- crenulate* – minutely crenate (margin of pileus) (Fig. 29.46); – (lamella edge) (Fig. 30.34).

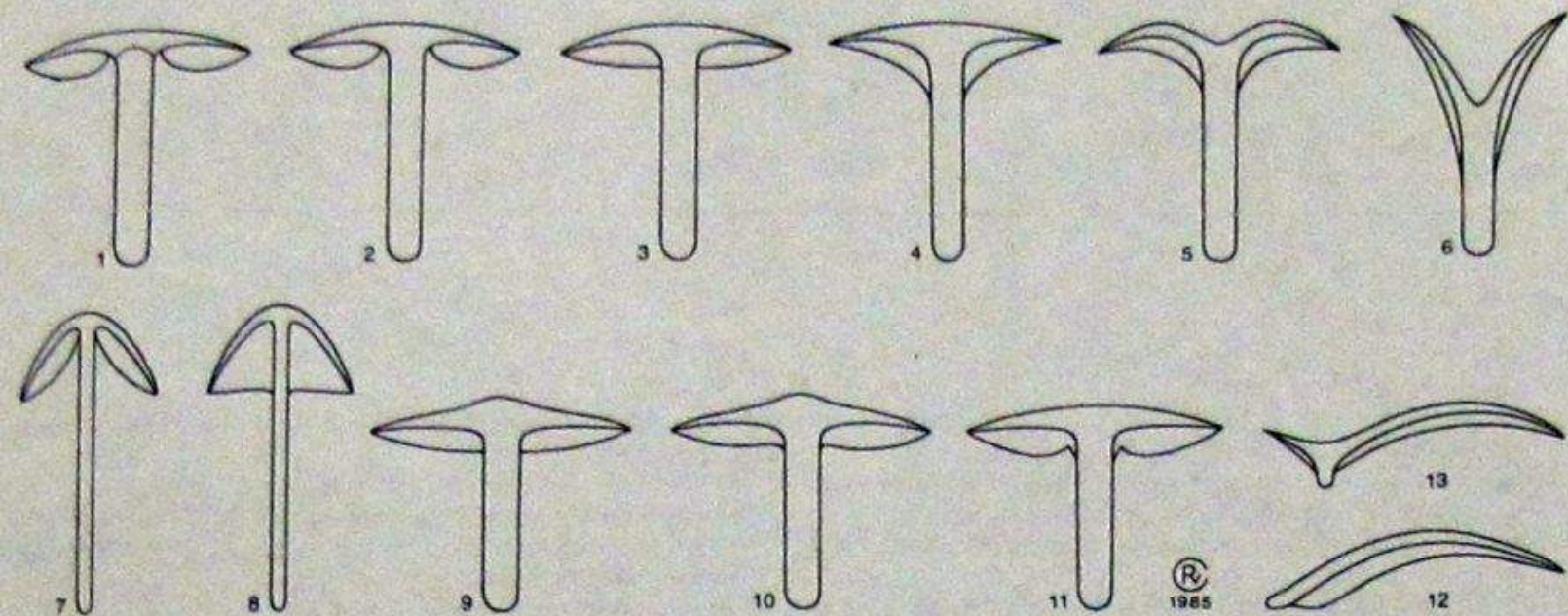


Fig. 28. Habit: 1. pluteoid; 2, 3. collybioid; 4-6. omphalioid; 7, 8. mycenoid; 9-11. tricholomatoid; 12, 13. pleurotoid.

*crepidotoid* – see pleurotoid.

*curved* – (stipe) bent from substrate upwards as to adjust to the gravitations.

*cutis* – a pileipellis consisting of repent non-gelatinizing hyphae (Fig. 36.1).

*cyanophilous* – (spore wall) accumulating Cotton Blue.

*cylindrical* – (stipe) circular in cross-section and of equal diameter from apex to base (Fig. 31.4); – (spores)  $l/w = l/b = 2.0-3.0$ , in outline with parallel sides; – (cystidia)  $Q = 2-4$  (Fig. 34.10), see also narrowly cylindrical and broadly cylindrical.

*cystidium* – sterile, differentiated, terminal element in the hymenium, or on the surfaces of the basidiocarp.

*decurrent* – (lamellae) descending down the stipe (angle lamellae-stipe  $40-60^\circ$ ) (Fig. 30.28), see also deeply decurrent.

*decurrent tooth* – (of lamellae) (Figs 30.25, 30.26).

*deeply decurrent* – (lamellae) (angle lamellae-stipe  $< 40^\circ$ ) (Fig. 30.29).

*deeply infundibuliform* – (pileus) (Fig. 29.23).

*deeply umbilicate* – (pileus) with deep abrupt depression (Fig. 29.28).

*deflexed* – (margin of pileus) bent downwards (Fig. 29.37).

*deliquescent* – (lamellae and/or basidiocarps) becoming liquid after maturing.

*depressed* – (pileus) with central depression/sinking (Fig. 29.25), see also slightly depressed.

*depression* – (of pileus), see depressed; – (of spores), see suprahilar depression.

*derm* – a pileipellis consisting of erect elements, or of ascending elements, see trichoderm and hymeniderm.

*dextrinoid* – (spore wall, hyphal walls) staining red to reddish brown in Melzer's reagent.

*dimitic* – (tissues) consisting of generative hyphae and skeletal hyphae or binding hyphae.

*diverticulate* – (cystidia) with short finger-like excrescences (Fig. 34.45).

*divergent* (= bilateral) – (hymenophoral trama) having downward hyphae turning outward from a median line (Fig. 35.5, 35.6).

*eccentric* – (stipe) not attached to centre of pileus (Fig. 31.2) – (germ pore) situated at the abaxial side of the spore (Fig. 33.26).

*ectosporium* – the very thin outer layer of the basidiospore wall.

*ellipsoid* – (spores)  $l/w = l/b = 1.3-1.6$  (Fig. 33.4); – (cystidia)  $Q =$

1.3-1.6 (Fig. 34.2), see also broadly ellipsoid.

*emarginate* – (lamellae) notched near the stipe (Fig. 30.23) AKA Notched or Sinoate attach

*en brosse* – (of cystidia) with excrescences, diverticulate (Fig. 34.45).

*endosporeium* – the electron transparent inner layer of the basidiospore wall at the inside of the episporium, but lacking in many white- and pale-spored taxa.

*entire* – (lamella edge) straight, smooth, and glabrous (Figs 30.30, 30.38).

*episporium* – the electron opaque fundamental layer present in all basidiospores of the Hymenomycetes; it is the innermost layer of the spore wall when the endosporeium is lacking.

*epithelioid hymeniderm* – a hymeniderm made up of elements with  $Q = 1.0-1.15$  (Fig. 36.9).

*epithelium* – a pileipellis made up of globose to broadly ellipsoid elements in more than one layer deep; see regular epithelium and irregular epithelium.

*equal* – (stipe) of equal diameter from apex to base.

*erect* – (hyphae or projections of hyphae) perpendicular to surface of pileus.

*eroded* – irregularly toothed (margin of pileus) (Fig. 29.47); – (of lamella edge) (Fig. 30.37).

*euhymeniderm* – a hymeniderm made up of elements with  $Q = 1.15-6$  (Fig. 36.8).

*eusporium* – the inner set of firm and resistant layers of the basidiospore wall, consisting of the episporium and the endosporeium.

*even* – (lamella edge) straight, smooth and glabrous, entire (Figs 30.30, 30.38).

*exceeding* – (margin of pileus with regard to lamellae) (Fig. 29.42).

*exosporium* – a layer of the basidiospore wall between perisporium and episporium, frequently responsible for the ornamentation of spores.

*fasciculate* – (basidiocarps) growing in a bundle.

*felted* – (pileus, stipe surfaces, and volva) composed of, or covered with, densely compressed, matted hairs or fibrils.

*fertile* – (lamella edge) composed of basidia only.

*fibrillose* – (pileus and stipe surfaces) covered with thin, thread-like fibres.

*filiform* – (cystidia) very long and narrowly cylindrical.

*fimbriate* – (lamella edge with regular hair-like projections (Fig. 30.39).

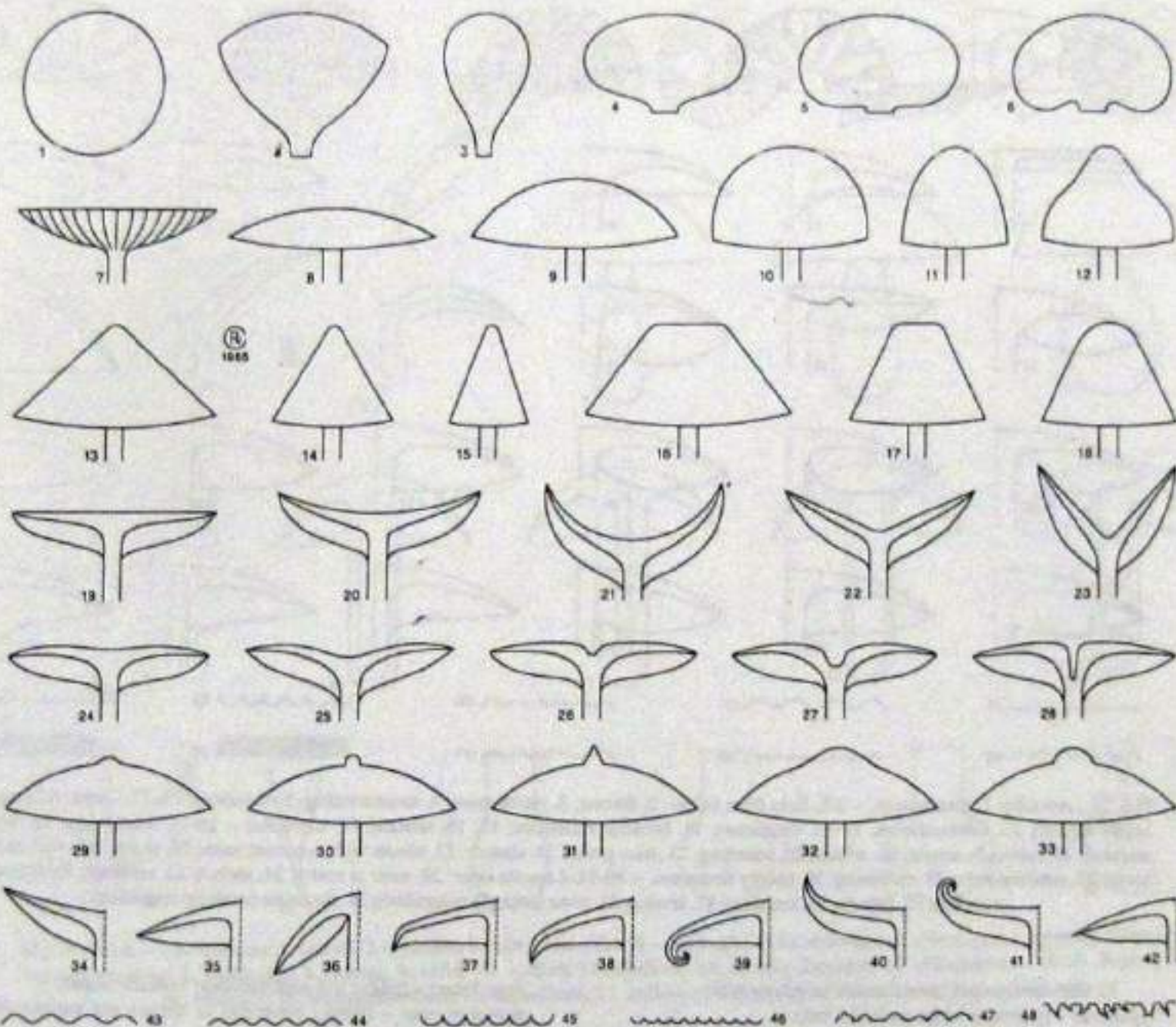


Fig. 29. Pileus. - 1-6. *Shape when seen from above*: 1. circular; 2. flabelliform; 3. spatuliform; 4, 5. rounded flabelliform; 6. reniform. - 7-23. *Shape when seen from side*: 7. applanate; 8. plano-convex; 9. convex; 10. hemispherical; 11. paraboloid; 12. campanulate; 13. broadly conical; 14. conic; 15. narrowly conical; 16. truncately broadly conical; 17. truncately conical; 18. obtusely conical; 19. applanate; 20. plano-concave; 21. concave; 22. infundibuliform; 23. deeply infundibuliform. - 24-33. *Shape of centre*: 24. slightly depressed; 25. depressed; 26. subumbilicate; 27. umbilicate; 28. deeply umbilicate; 29. with papilla; 30. with abrupt papilla; 31. with acute papilla; 32. subumbonate; 33. umbonate. - 34-42. *Aspects of margin*: 34-36. straight; 37. deflexed; 38. inflexed; 39. involute; 40. reflexed; 41. revolute; 42. exceeding lamellae. - 43-48. *Shape of margin*: 43. undulate; 44. undulate; 45. crenate; 46. crenulate; 47. eroded; 48. appendiculate.

*fissurate* - (pileus and stipe surfaces) with deep and/or distinct clefts.

*fistulose* - (stipe) hollow (Fig. 31.11), see also broadly fistulose.

*flabelliform* - (pileus) fan-shaped (Fig. 29.2), see also rounded flabelliform.

*flexuose* - (stipe) full of bends; - (cystidia) cylindrical but with bends (Fig. 34.36).

*floccose* - (pileus and stipe surfaces) covered with tufts of soft hairs.

*flocculose* - (pileus and stipe surfaces) minutely floccose.

*free* - (lamellae) not attached to stipe (Fig. 30.18).

*fringed* - (lamella edge) with irregular appendages.

*frontal view* - (of spores) (Fig. 32.2).

*fundamental hyphae* - the inflated hyphae giving the fleshy basidiocarp its firmness.

*fusiform* - spindle shaped, tapering at both ends, (spores) with l/w or = 2.0-4.0 (Fig. 33.13); - (cystidia) with Q = 2.0-4.0 (Fig. 34.20), also narrowly, broadly, and very broadly fusiform.

*furcate* - (lamellae) forked (Fig. 30.2).

*generative hyphae* - the basic type of septate, thin- to thick-walled branching hyphae, present in all (young) basidiocarps, from which all differentiated hyphae arise (used in opposite of binding skeletal hyphae).

*germ pore* - (of spores) apical thin-walled spot in spore wall (0

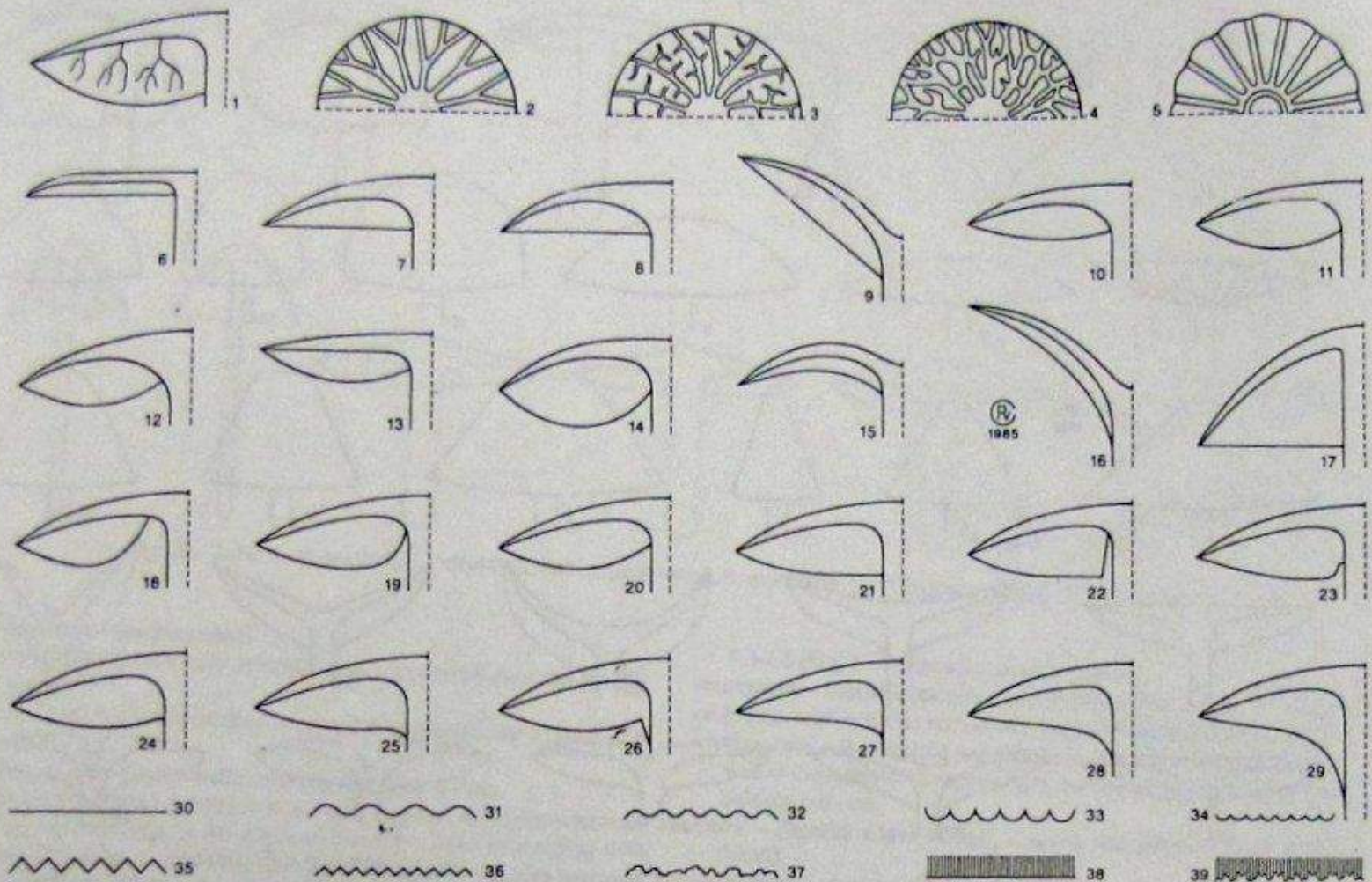


Fig. 30. Lamellae: 1. transvenose. – 2-5. *Seen from below*: 2. furcate; 3. intervenose; 4. anastomosing; 5. collarium. – 6-17. *Shape*: 6. linear; 7-9. segmentiform; 10. subventricose; 11-13. ventricose; 14. broadly ventricose; 15, 16. arcuate; 17. triangular. – 18-29. *Attachment*: 18. free; 19. adnexed. 20. narrowly adnate; 21. adnate; 22. seceding; 23. emarginate; 24. sinuate; 25. adnate with decurrent tooth; 26. emarginate with decurrent tooth; 27. subdecurrent; 28. decurrent; 29. deeply decurrent. – 30-39. *Lamella edge*: 30. even or entire; 31. undulate; 32. undulate; 33. crenate; 34. crenulate; 35. serrate; 36. serrulate; 37. eroded; 38. even (strongly magnified); 39. fimbriate (strongly magnified).

32.6E), see also central and eccentric germ pore.

*glabrous* – (pileus and stipe surfaces) bald.

*globose* – spherical, (spores)  $l/w = l/b = 0.95-1.05$  (Fig. 33.1); – (cystidia)  $Q = 1.0-1.05$  (Fig. 34.5).

*granulose* – (pileus and stipe surfaces) covered with (or composed of) minute grains.

*gregarious* – (basidiocarps) growing in a group.

*guttule* – droplet (Fig. 32.6G).

*gymnocarpy* – a type of development of the basidiocarp in which the hymenium is exposed from initiation till maturity.

*hemispherical* – (pileus) with shape of a half sphere (Fig. 29.10).

*heterogeneous* – (lamella edge) composed of cystidia and basidia.

*heteromerous* – (tissue) consisting of hyphae and 'nests' of spherocysts.

*hexagonal* – (spores) six-angled (Figs 33.22, 33.23).

*hilar appendage* – (of spores) short process at basal end of spore, by which it was attached to sterigma (Fig. 32.4C).

*hilum* – scar left on the hilar appendage of the basidiospore after its discharge from the sterigma.

*hirsute* – (pileus and stipe surfaces) covered with rather long, rather coarse hairs (coarser than in pubescent, less coarse than in hispid).

*hispid* – (pileus and stipe surfaces) covered with long or short, erect, stiff hairs or bristles.

*hispidulous* – (pileus and stipe surfaces) minutely hispid.

*homoimerous* – (tissue) consisting of hyphae and without nests of spherocysts.

*hymeniderm* – a derm made up of non-septate elements originating at the same level, see also epithelioid hymeniderm, and transition between hymeniderm and epithelium.

*imbricate* – (basidiocarps) growing immediately above each other.

*incrusted* – see incrusting.

*incrusting* – (pigment) situated on the outer side of the wall, and visible as bands, granules or patches.

*inflated* – (hyphae) swollen, not cylindrical.

*inflexed* – (margin of pileus) bent inwards (Fig. 29.38).

*infundibuliform* – (pileus) funnel-shaped (Fig. 29.22), see also deeply infundibuliform.

*intercellular* – (pigment) situated between the elements.

*intervenose* – (lamellae) provided with veins between the lamellae (Fig. 30.3).

*intracellular* – (pigment) situated inside the elements.

*intricate trichoderm* – a trichoderm made up of interwoven elements (Fig. 36.4).

*inverse* – (hymenophoral trama) having downward convergent hyphae, i.e. turning inward to a median line (Fig. 35.4).

*involute* – (margin of pileus) rolled in (Fig. 29.39).

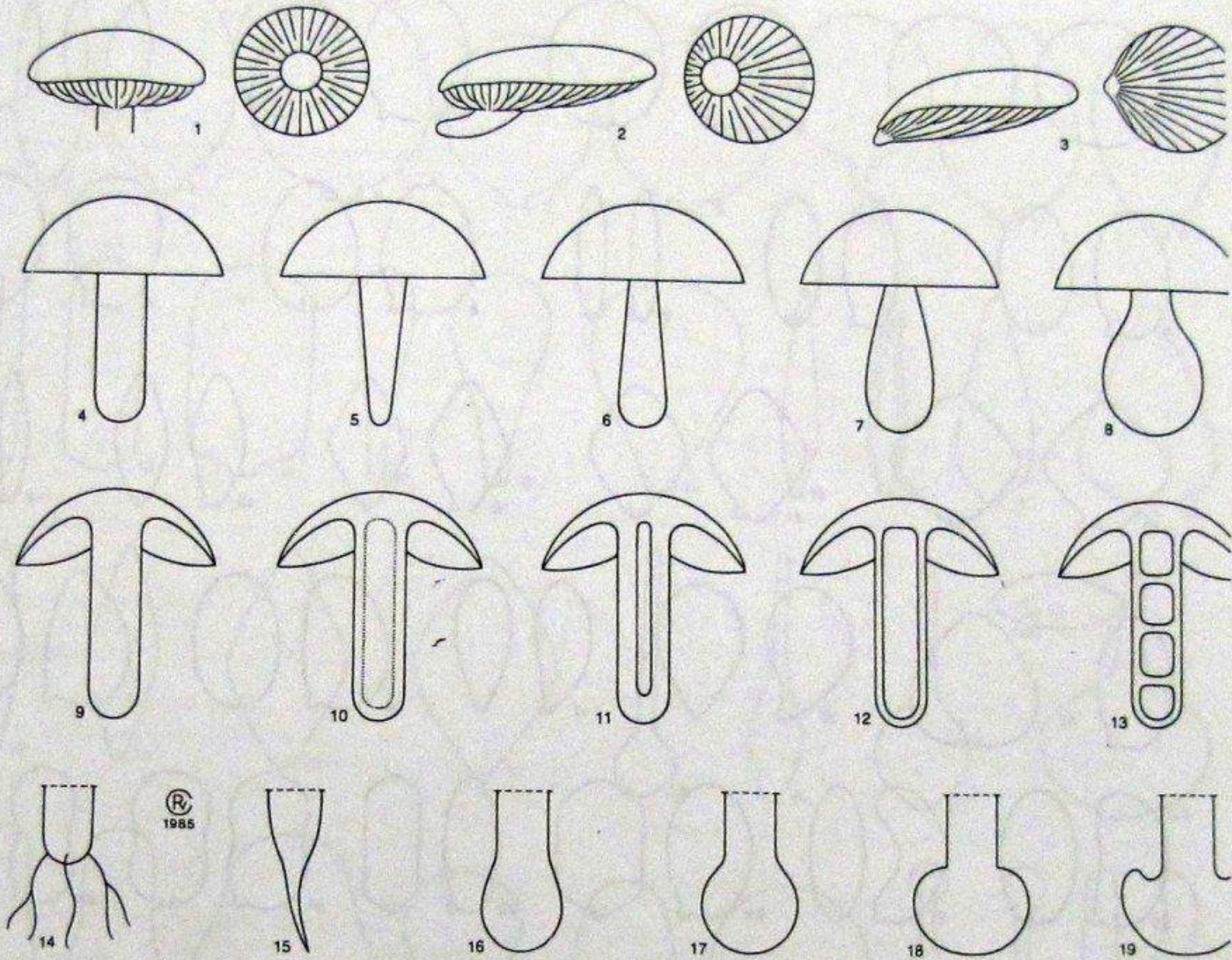


Fig. 31. Stipe. - 1-3. *Insertion*: 1. central; 2. eccentric; 3. lateral and reduced. - 4-13. *Shape and structure*: 4. cylindrical; 5. tapering downward; 6. tapering upwards; 7. subclavate; 8. clavate; 9. solid; 10. stuffed; 11. fistulose; 12. broadly fistulose; 13. chambered. - 14-19. *Base*: 14. rhizomorphs; 15. with pseudorrhiza; 16. subbulbous; 17. bulbous; 18. abruptly bulbous; 19. marginately bulbous.

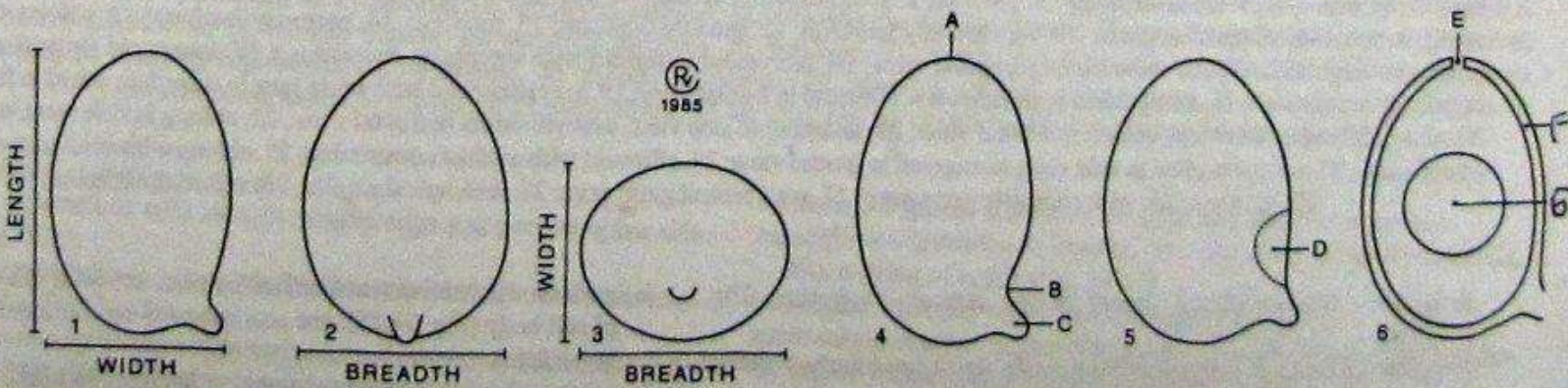


Fig. 32. Spore characters: 1. side-view; 2. frontal view; 3. polar view; 4. A. apex, B. suprahilar depression, C. hilar appendage; 5. D. suprahilar; 6. E. germ pore, F. thickened wall, G. guttule.

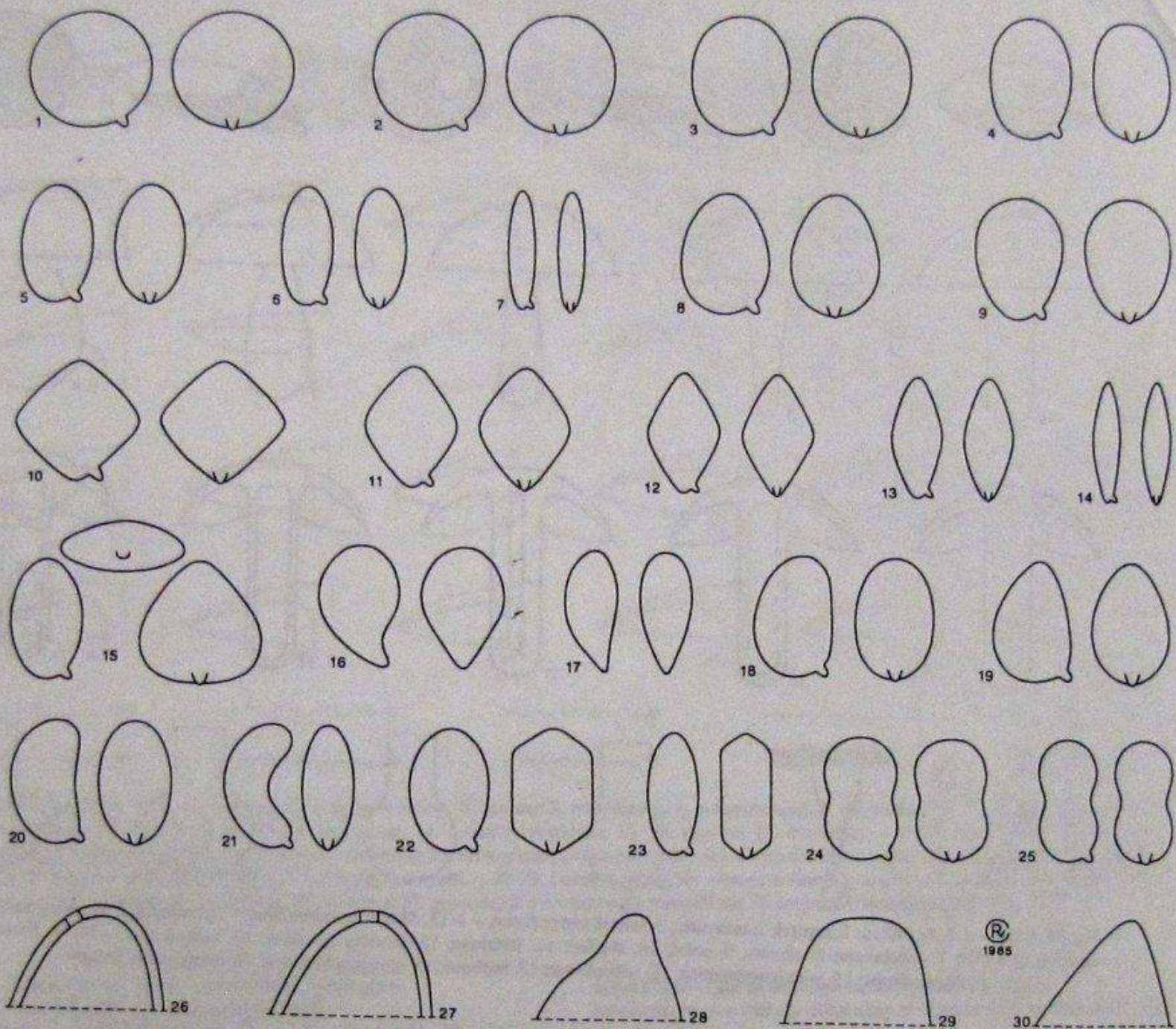


Fig. 33. Spores. — 1-25. *General shape*: 1. globose; 2. subglobose; 3. broadly ellipsoid; 4. ellipsoid; 5. oblong; 6. subcylindrical; 7. bacilliform; 8. ovoid; 9. obovoid; 10. quadrangular; 11. very broadly fusiform; 12. broadly fusiform; 13. fusiform; 14. narrowly fusiform; 15. oblong in side view, rounded triangular in frontal view, oblong in polar view; 16. lacrymoid (ellipsoid with suprahilar depression); 17. lacrymoid (subcylindrical with suprahilar depression); 18. amygdaliform in side view, ellipsoid in frontal view; 19. amygdaliform with acute apex in side view, ovoid in frontal view; 20. phaseoliform in side view, oblong in frontal view; 21. allantoid in side view, subcylindrical in frontal view; 22. oblong in side view, hexagonal in frontal view; 23. subcylindrical in side view, hexagonal in frontal view; 24. ellipsoid with median constriction; 25. oblong with median constriction. — 26-30. *Apex*: 26. with eccentric germ pore; 27. with central germ pore; 28. with apical papilla; 29. truncate; 30. acute.

*irregular* — (hymenophoral trama) having interwoven hyphae (Fig. 35.3).

*irregular epithelium* — an epithelium made up of irregularly disposed elements (Fig. 36.12).

*irregular trichoderm* — (Fig. 36.5).

*ixocutis* — a cutis made up of gelatinizing hyphae (Fig. 36.2).

*ixotrichoderm* — a trichoderm, made up of gelatinizing elements (Fig. 36.6).

*lacrymoid* — (spores) with confluent hilar appendage (Figs 33.16, 33.17).

*lageniform* — (cystidia) characterized by neck narrower than half width of cell body (Fig. 34.25), see also narrowly lageniform and broadly lageniform.

*lamellate* — (hymenophore) consisting of lamellae (= gills).

*lanate* — (pileus and stipe surfaces) (= woolly) covered with long, soft, matted hairs.

*lateral* — (stipe) attached to one side of pileus (Fig. 31.3).

*lecythiform* — (cystidia) lageniform and abruptly capitate (Fig. 34.33).

*length* — (of spores) distance from apex to bottom as seen in side view (Fig. 32.1).

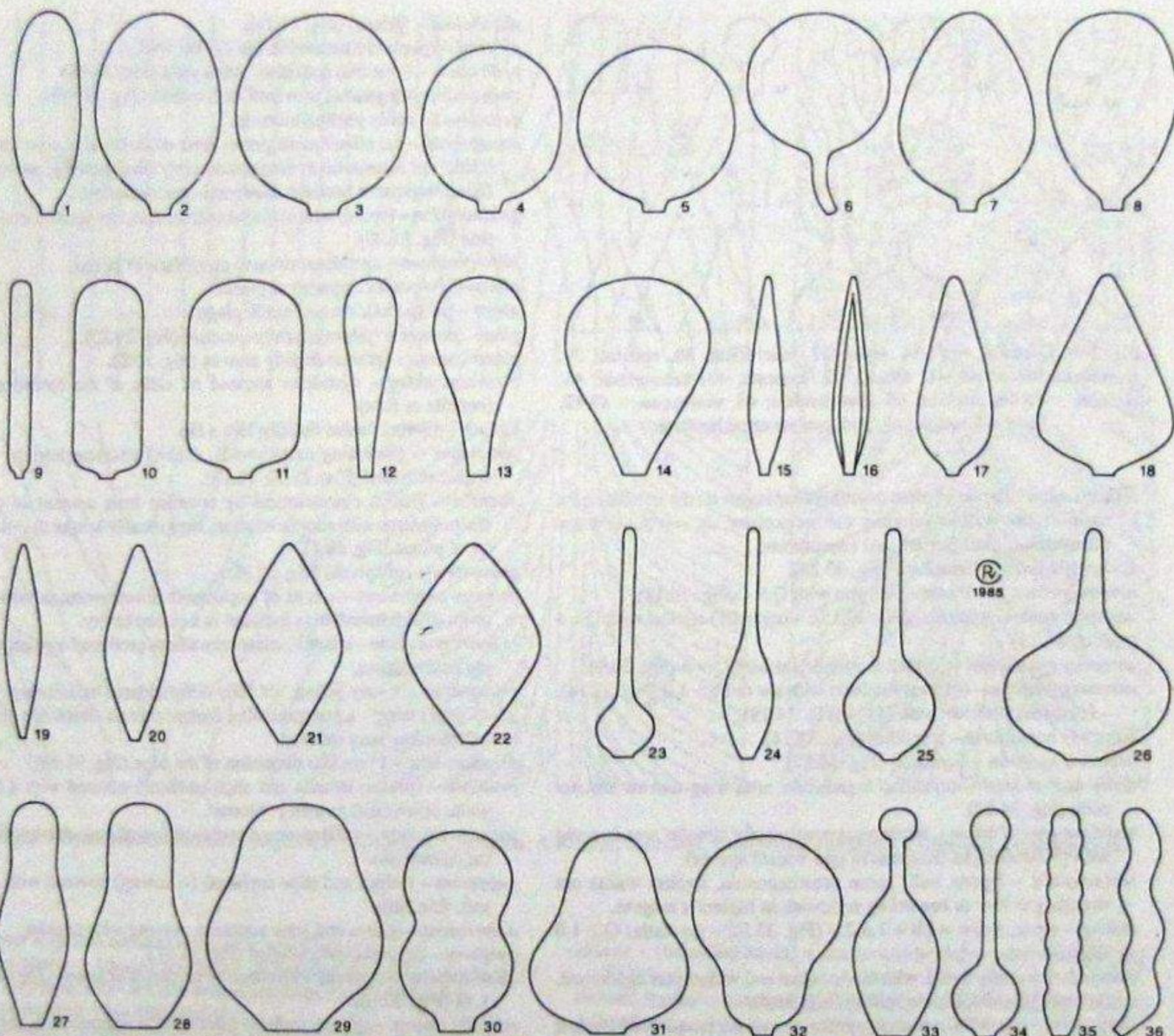


Fig. 34a. Cystidia. - 1-36. *General shape*: 1. oblong; 2. ellipsoid; 3. broadly ellipsoid; 4. subglobose; 5. globose; 6. spheropedunculate; 7. ovoid; 8. obovoid; 9. narrowly cylindrical; 10. cylindrical; 11. broadly cylindrical; 12. narrowly clavate; 13. clavate; 14. broadly clavate; 15. narrowly conical; 16. setiform; 17. conical; 18. broadly conical; 19. narrowly fusiform; 20. fusiform; 21. broadly fusiform; 22. very broadly fusiform; 23. nettle hair-shaped; 24. narrowly lageniform; 25. lageniform; 26. broadly lageniform; 27. narrowly utriform; 28. utriform; 29. broadly utriform; 30. with median constriction; 31. pyriform; 32. obpyriform; 33. lecythiform; 34. tibiiform; 35. moniliform; 36. flexuose.

*lignicolous* - growing on wood.

*linear* - (lamellae) with straight lamella edge and parallel upper side (Fig. 30.6).

*marginately bulbous* - (base of stipe) provided with a bulb with a raised border (Fig. 31.19).

*marmorate* - (pileus and stipe surfaces, and context) (= marbled) faintly and irregularly striped or innately veined.

*medallion clamp* - a clamp connection with an opening between the clamp connection itself and the elements connected by it.

*median constriction* - transverse contraction in the middle, (of spores) (Figs 33.24, 33.25); - (of cystidia) (Fig. 34.30).

*metachromatic* - (spore wall) turning reddish to violet in solution of Chrysol Blue in H<sub>2</sub>O.

*micaceous* - (pileus surface) with glistening particles or spots.

*moniliform* - (cystidia) cylindrical but contracted at regular intervals, like a string of beads (Fig. 34.35).

*monomitic* - (tissue) built up of one type of hyphae.

*monovelangiocarp* - a type of angiocarpic development of the basidiocarp in which only a universal veil participates.

*mucilaginous* - consisting of mucilage (= viscous substance).

*mucous* - (pileus and stipe surfaces) slimy.

*mucronate* - (cystidia) with small abrupt, acute or blunt protuberance at apex (Fig. 34.37).

*mycenoid* - (habit) characterized by pileus conical to paraboloid; lamellae free to adnate; stipe usually long and slender; context usually brittle (Figs 28.7, 28.8).

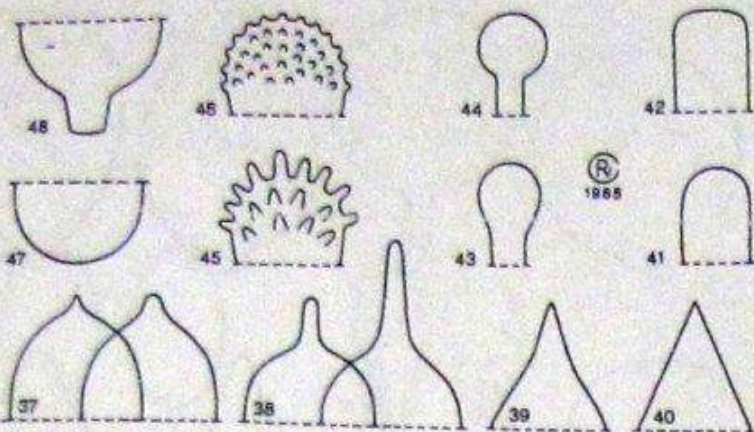


Fig. 34b. Cystidia. — 37-44. Apex: 37. mucronate; 38. rostrate; 39. acuminate; 40. acute; 41. obtuse; 42. truncate; 43. subcapitate; 44. capitate. — 45-46. Surface: 45. diverticulate; 46. verrucose. — 47-48. Base: 47. sessile; 48. pedunculate or pedicellate.

*myxosporium* — the set of often mucilaginous layers on the outside of the basidiospore wall enveloping the eusporium; its components are ectosporium, perisporium and exosporium.

*narrowly adnate* — (lamellae) (Fig. 30.20).

*narrowly clavate* — (cystidia) clavate with  $Q > 4$  (Fig. 34.12).

*narrowly conical* — (pileus) (Fig. 29.15); — (cystidia) conical with  $Q > 4$  (Fig. 34.15).

*narrowly cylindrical* — (cystidia) cylindrical with  $Q > 4$  (Fig. 34.9).

*narrowly fusiform* — (spores) fusiform with  $l/w$  or  $l/b > 4.0$  (Fig. 33.14); — (cystidia) fusiform with  $Q > 4$  (Fig. 34.19).

*narrowly lageniform* — (cystidia) (Fig. 34.24).

*narrowly utriform* — (cystidia) (Fig. 34.27).

*nettle hair-shaped* — (cystidia) lageniform with long narrow slender neck (Fig. 34.23).

*nodulose type of hilum* — hilum an approximately circular area covered with protuberances (frequent in thin-walled spores).

*non-amyloid* — (spore wall, spore ornamentation, hyphal walls) not changing colour or becoming yellowish in Melzer's reagent.

*oblong* — (spores)  $l/w = l/b = 1.6-2.0$  (Fig. 33.5); — (cystidia)  $Q \geq 1.6$  (Fig. 34.1).

*obovoid* — reversely ovoid, with the broadest and widest part uppermost, (spores) (Fig. 33.9); — (cystidia) (Fig. 34.8).

*obpyriform* — (cystidia) reversely pyriform, with the broadest and widest part uppermost (Fig. 34.32).

*obtuse* — (apex of cystidia) rounded (Fig. 34.41).

*obtusely conical* — (pileus) conical with rounded apex (Fig. 29.18).

*omphalioid* — (including omphalinoid and clitocyboid) (habit) characterized by pileus plano-convex to deeply infundibuliform; lamellae decurrent (Figs 28.4, 28.5, 28.6).

*omphalinoid* — see omphalioid.

*opaque* — (pileus) not translucent.

*open pore type of hilum* — hilum with a depression or perforation at one side and sometimes a perforation or tear at the other side of the hilar appendage often connected by a slit (frequent in thick-walled spores).

*ovoid* — egg-shaped (spores) (Fig. 33.8); — (cystidia) (Fig. 34.7).

*papilla* — small nipple-like protuberance, (on pileus) (Fig. 29.29); — (on spores) (Fig. 33.28), see also abrupt and acute papilla.

*papillate* — (pileus surface) covered with papils.

*paravelangiocarpy* — a type of angiocarpic development of the basidiocarp in which only a partial veil participates.

*patent* — (hyphae or projections of hyphae) perpendicular to surface of stipe.

*paraboloid* — (pileus) (Fig. 29.11).

*parietal* — (pigment) situated in the hyphal wall.

*pedicellate* — (cystidia) provided with a stalk (Fig. 34.48).

*pedunculate* — (cystidia) provided with a stalk (Fig. 34.48).

*pellicle* — an easily peeling ixocutis.

*perisporium* — the often mucilaginous layer of the basidiospore wall just inside the ectosporium; sometimes early disappearing, sometimes filling the spaces between exosporal ornamentations.

*phaseoliform* — (spore) with concave adaxial side, not parallel to abaxial side (Fig. 33.20).

*pileocystidium* — cystidium situated on surface of pileus.

*pileipellis* — cortical layer(s) of pileus.

*plage* — (of spores), see suprahilar plage.

*plano-concave* — (pileus) slightly concave (Fig. 29.20).

*plano-convex* — (pileus) slightly convex (Fig. 29.8).

*pleurocystidium* — cystidium situated on sides of the hymenophore (lamella or tube).

*plicate* — (pileus) folded radially, like a fan.

*pleurotoid* — (including crepidotoid), (habit) characterized by stipe absent or lateral (Figs 28.12, 28.13).

*pluteoid* — (habit) characterized by lamellae free; context of pileus discontinuous with context of stipe; stipe usually longer than diameter of pileus (Fig. 28.1).

*polar view* — (of spores) (Fig. 32.3).

*primary angiocarpy* — a type of angiocarpic development in which the primordial hymenium is initiated in a closed cavity.

*primary mycelium* — the uninucleate mycelium produced by a germinating basidiospore.

*primordium* — a very young, not fully differentiated basidiocarp.

*protocarpic tuber* — a non-persisting fleshy tuber on which one or more basidiocarps may develop.

*pseudoryhiza* — a root-like extension of the stipe (Fig. 31.15).

*pruinose* — (pileus, lamella and stipe surfaces) covered with a (often white or whitish) powdery 'bloom'.

*pseudocystidium* — differentiated prolongation of vascular hypha into the hymenium.

*pubescent* — (pileus and stipe surfaces) (= downy) covered with short, soft, fine hairs.

*pulverulent* — (pileus and stipe surfaces) covered with powder.

*pyriform* — (cystidia) pear-shaped (Fig. 34.31).

*quadrangular* — (spores) with shape of rectangle or square;  $l/w$  or  $l/b \leq 1.15$  (Fig. 33.10).

*radially rimose* — (pileus surface) marked with numerous, superficial, radial clefts or cracks.

*Rameales-structure* — (of pileipellis) with irregularly shaped and arranged, nodose or en brosse or diverticulate elements.

*reduced* — (stipe) very short (Fig. 31.3).

*reflexed* — (margin of pileus) bent upwards (Fig. 29.40).

*regular* — (hymenophoral trama) having parallel hyphae (Fig. 35.1).

*regular epithelium* — an epithelium made up of elements in erect rows (Fig. 36.11).

*reniform* — (pileus) kidney-shaped (Fig. 29.6).

*repent* — (hyphae) creeping, not ascending.

*reticulately venose* — (pileus surface) marked with anastomosing veins forming angular patches.

*revolute* — (margin of pileus) rolled back (Fig. 29.41).

*rhizomorph* — a visible root-like mycelial strand (Fig. 31.14).

*rimose* — see radially rimose; areolate-rimose.

*rimulose* — (pileus surface) minutely rimose.

*rostrate* — (cystidia) provided with a beak-like extension at apex (Fig. 34.38).

*rounded flabelliform* — (pileus) (Figs 29.4, 29.5).

*rounded triangular* — (spores) rounded three-angled (Fig. 33.15).



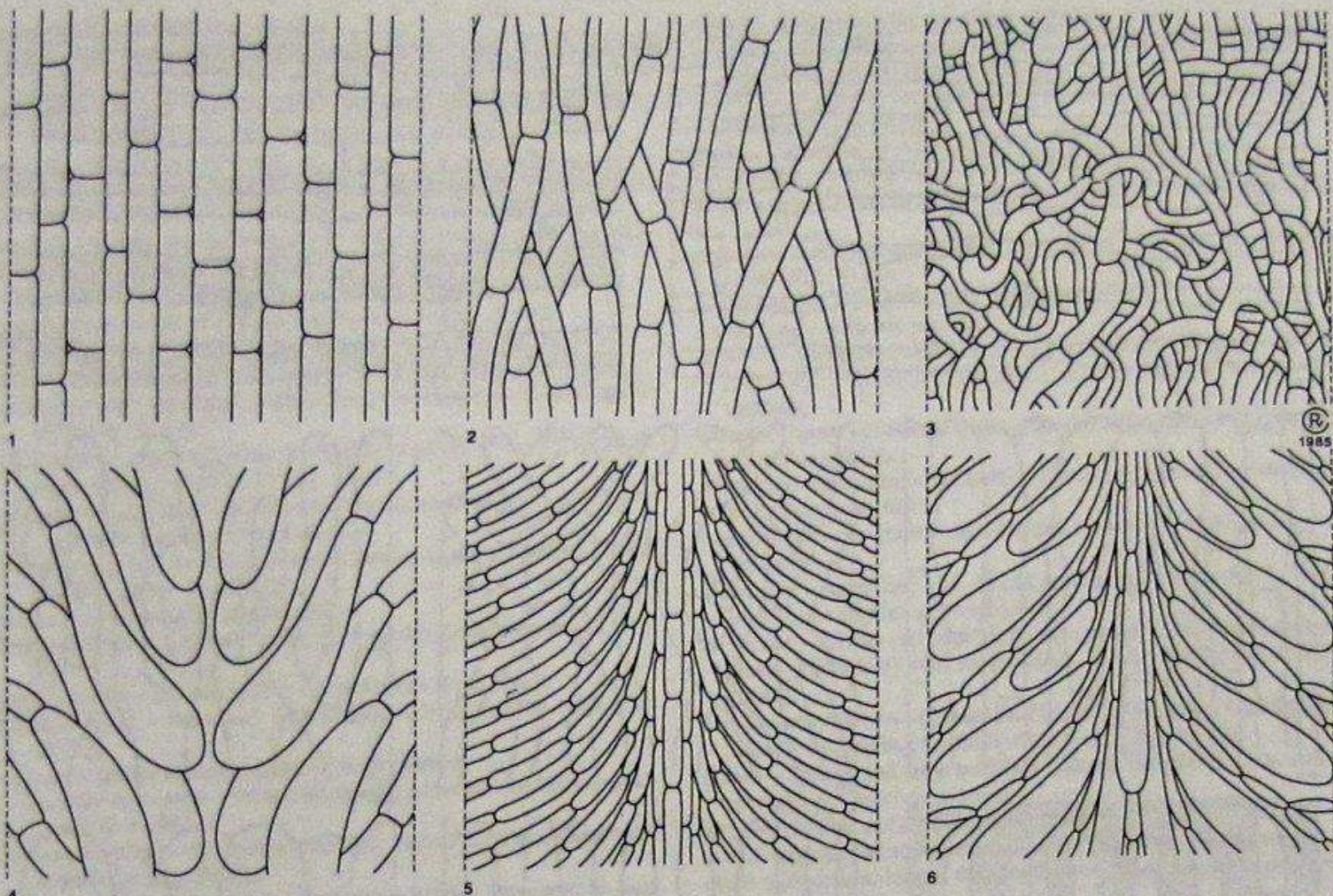


Fig. 35. Hymenophoral trama: 1. regular; 2. subregular; 3. irregular; 4. inverse; 5. divergent (*Hygrophorus*-type); 6. divergent (*Amanita*-type).

*rugose* – (pileus surface) irregularly wrinkled.

*sarcodimitic* – (tissue) consisting of generative hyphae and chains of very long, thin- to thick-walled elements ('sarcoskeletals').

*sarcoskeletals* – see sarcodimitic.

*sclerotium* – a (long) persisting compact mycelial body from which a basidiocarp arises.

*seceding* – (lamellae) at first attached to stipe, but later separating from it (Fig. 30.22).

*secondary angiocarpy* – a type of angiocarpic development in which in its later stages the primordial hymenium is enveloped by hyphae originating from the stipe and/or the pileus.

*segmentiform* – (lamellae) with straight lamella edge and convex upper side (Figs 30.7, 30.8, 30.9).

*septate* – (hyphae) with septa.

*sericeous* – (pileus and stipe surfaces) (= silky) covered with fine, straight, adpressed, glossy hairs or fibrils.

*serrate* – (lamella edge) toothed like a saw (Fig. 30.35).

*serrulate* – (lamella edge) minutely serrate (Fig. 30.36).

*sessile* – (cystidia) without a stalk (Fig. 34.47).

*setiform* – (cystidia) narrowly conical with thickened wall (Fig. 34.16).

*side view* – (of spores) (Fig. 32.1).

*siderophilous* – (particles in basidia) turning blackish purple or blackish violet in acetocarmine in presence of metal ions.

*sinuate* – (lamellae) having a concave indentation near the stipe (Fig. 30.24).

*skeletal hyphae* – aseptate, thick-walled, straight or slightly flexuous hyphae.

*slightly depressed* – (pileus) with shallow central depression (Fig. 29.24).

*smooth* – (pileus and stipe surfaces) without elevations, ridges, grooves, veins, etc.

*solid* – (stipe) made up of homogeneous tissue (Fig. 31.9).

*solitary* – (basidiocarps) single.

*spathuliform* – (pileus) elliptic or oblong tapering gradually towards stipe (Fig. 29.3).

*spheropedunculate* – (cystidia) globose or subglobose with long stalk (Fig. 34.6).

*squamose* – (pileus and stipe surfaces) covered with coarse (adpressed) scales.

*squamulose* – (pileus and stipe surfaces) covered with minute scales.

*squarrose* – (pileus and stipe surfaces) covered with projecting coarse scales.

*squarrulose* – (pileus and stipe surfaces) covered with small projecting scales.

*statismosporic basidium* – a basidium that does not discharge its spores; they simply break off from the sterigmata.

*sterile* – (lamella edge) composed of cystidia only.

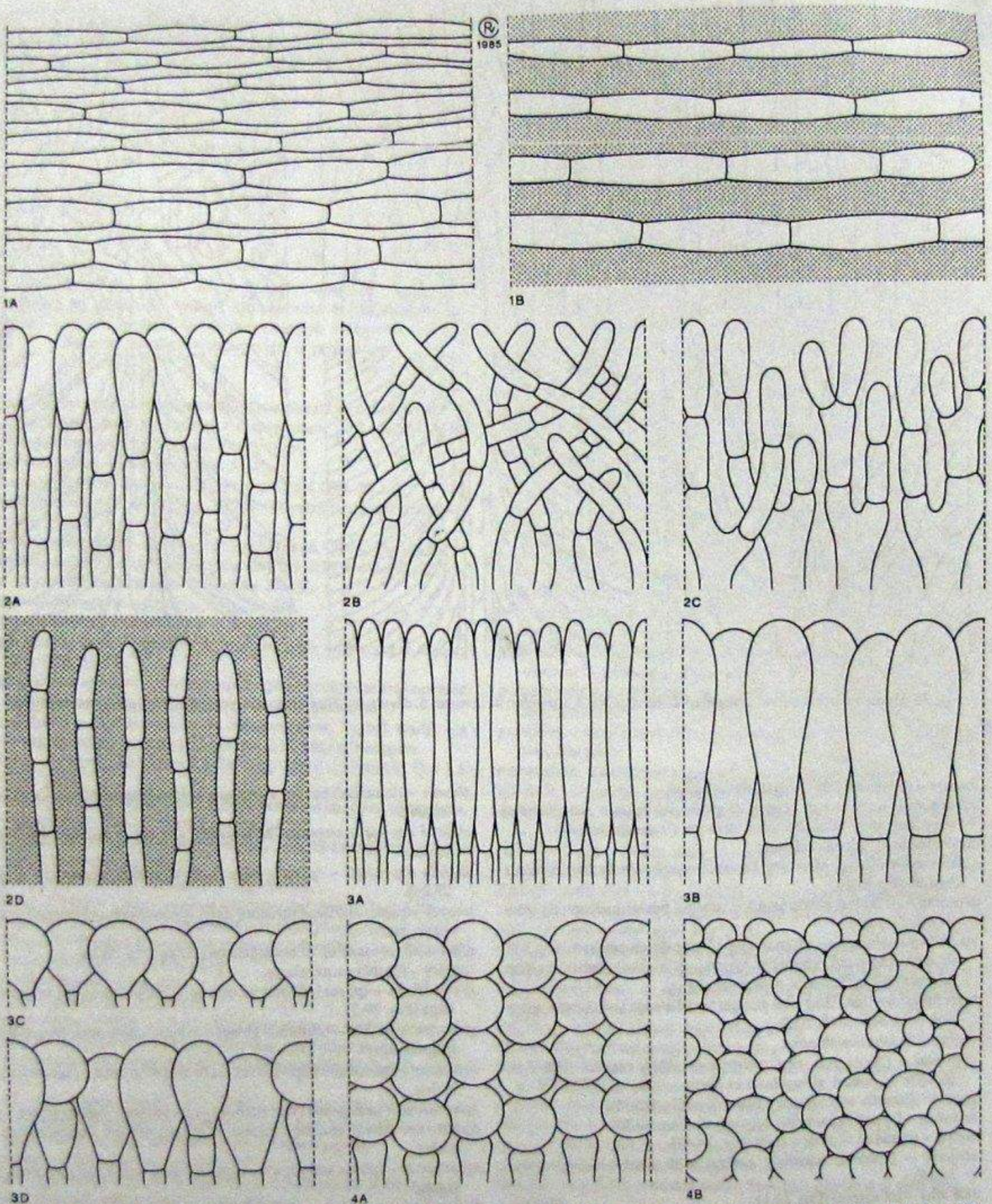


Fig. 36. Pileipellis structures: 1A. cutis; 1B. ixocutis; 2A. trichoderm; 2B. intricate trichoderm; 2C. irregular trichoderm; 2D. ixotrichoderm; 3A. trichohymeniderm; 3B. euhymeniderm; 3C. epithelioid hymeniderm; 3D. transition between hymeniderm and epithelium; 4A. regular epithelium; 4B. irregular epithelium.

*stipitipellis* – cortical layer of stipe.  
*stipitocarpus* – a type of development of the basidiocarp in which the first differentiating hyphae of the primordium are those of the stipe.  
*straight* – (margin of pileus) not bent upwards or inwards (Figs 29.34, 29.35, 29.36).  
*striate* – (pileus and stipe surfaces) marked with regular lines.  
*strigose* – (pileus and stipe surfaces) covered with long, coarse or thick, rather stiff hairs.  
*stuffed* – (stipe) having central part filled with tissue different from tissue in outer part (Fig. 31.10).  
*subbulbous* – (base of stipe) slightly bulbous (Fig. 31.16).  
*subcapitate* – (apex of cystidia) having a knob (Fig. 34.43).  
*subclavate* – (stipe) slightly club-shaped (Fig. 31.7).  
*subcylindrical* – (spores)  $l/w = l/b = 2.0-3.0$  (Fig. 33.6).  
*subdecurrent* – (lamellae) slightly decurrent, (angle lamellae-stipe 60-80°) (Fig. 30.27).  
*subglobose* – nearly spherical, (spores)  $l/w = l/b = 1.05-1.15$  (Fig. 33.2); – (cystidia)  $Q = 1.05-1.15$  (Fig. 34.4).  
*subgregarious* – (basidiocarps) growing in a small group or growing in a group of widespread specimens.  
*subregular* – (hymenophoral trama) having slightly flexuose, nearly parallel hyphae (Fig. 35.2).  
*subpellis* – lower layer of pileipellis.  
*subumbilicate* – (pileus) having a small navel-like depression (Fig. 29.26).  
*subumbonate* – (pileus) with low broad umbo (Fig. 29.32).  
*subventricose* – (lamellae) with slightly convex lamella edge (Fig. 30.10).  
*sulcate* – (pileus and stipe surfaces) with grooves.  
*suprahilar depression* – (of spores) sinking just above the hilar appendage (Fig. 32.4B).  
*suprahilar plage* – (of spores) rounded, smooth area just above hilar appendage (Fig. 32.5D).  
*tapering downwards* – (stipe) becoming narrower from apex to base (Fig. 31.5).  
*tapering upwards* – (stipe) becoming narrower from base to apex (Fig. 31.6).  
*thick-walled* – (spores) (Fig. 32.6F).  
*tibiiform* – (cystidia) lageniform with long neck and capitate (Fig. 34.34).  
*tomentose* – (pileus and stipe surfaces) densely covered with matted (more or less adpressed), soft hairs.  
*tooth* – (of lamellae), see decurrent tooth.  
*transition between hymeniderm and epithelium* – (Fig. 36.10).  
*transvenose* – (lamellae) provided with veins on the surface (Fig. 30.1).  
*triangular* – (lamellae) (Fig. 30.17); – (spores), see rounded triangular.  
*trichoderm* – a pileipellis made up of erect straight elements, septate and/or not originating at the same level (Fig. 36.3); see also intricate and irregular trichoderm.  
*trichohymeniderm* – a hymeniderm made up of elements with  $Q > 6$  (Fig. 36.7).  
*tricholomatoid* – (habit) characterized by lamellae neither free, nor decurrent; stipe  $\pm$  as long as diameter of pileus; context fleshy; context of pileus continuous with context of stipe (Figs 28.9, 28.10, 28.11).  
*truncate* – ending abruptly as if cut off, (apex of spore) (Fig. 33.29); – (apex of cystidia) (Fig. 34.42).  
*truncate broadly conical* – (pileus) broadly conical with as if cut off apex (Fig. 29.16).  
*truncate conical* – (pileus) conical with as if cut off apex (Fig. 29.17).

*tubular* – (hymenophore) consisting of tubes.  
*twisted* – (stipe) fibrils arranged spirally round axis because of base of stipe being rotated with regard to apex.  
*umbilicate* – (pileus) having a navel-like depression (Fig. 29.27), see also deeply umbilicate.  
*umbo* – (on pileus) broad rounded knob (Fig. 29.33).  
*umbonate* – (pileus) with broad rounded knob (Fig. 29.33).  
*undate* – waved (margin of pileus) (Fig. 29.43); – (lamella edge) (Fig. 30.31).  
*undulate* – minutely undate (margin of pileus) (Fig. 29.44); – (lamella edge) (Fig. 30.32).  
*uniguttulate* – (spores) with one droplet (Fig. 32.6).  
*uninucleate* – with one nucleus.  
*utriform* – (cystidia) characterized by neck broader than half width of cell body (Fig. 34.28), see also narrowly utriform and broadly utriform.  
*vascular hypha* – usually aseptate, often irregular, flexuose hypha with refractive contents.  
*velutinous* – (pileus and stipe surfaces) (= velvety) densely covered with fine, short, erect hairs.  
*venose* – (pileus surface) with vein-like wrinkles, see also reticulately venose.  
*ventricose* – (lamellae) with convex lamella edge (Figs 30.11, 30.12, 30.13), see also broadly ventricose.  
*verrucose* – (pileus and stipe surfaces) covered with wart-like elevations; – (cystidia) with small hollow or solid protuberances (Fig. 34.46).  
*very broadly fusiform* – (spores) fusiform with  $l/w$  or  $l/b = 1.15-1.5$  (Fig. 33.11); – (cystidia), fusiform with  $Q < 1.5$  (Fig. 34.22).  
*villose* – (pileus and stipe surfaces) covered with fairly long, soft,  $\pm$  straight, not interwoven hairs.  
*virgate* – (pileus and stipe surfaces) streaked.  
*viscid* – (pileus and stipe surfaces) sticky, glutinous or gelatinous.  
*width* – (of spores) largest distance between sides as seen in side-view (Fig. 32.1).

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