

The Seeds of

Dicotyledons

E. J. H. CORNER

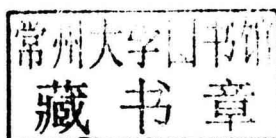
VOLUME 2

THE SEEDS OF DICOTYLEDONS

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VOLUME 2
ILLUSTRATIONS



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THE SEEDS OF DICOTYLEDONS
VOLUME 2

STANDARD ABBREVIATIONS FOR FIGURES

a.	aril
c.	cotyledon
e.	endosperm
enc.	endocarp
epc.	epicarp
exc.	exocarp
i.e.	inner epidermis
i.h.	inner hypodermis
i.i.	inner integument
l.s.	longitudinal section
mc.	mesocarp
n.	nucellus
o.e.	outer epidermis
o.h.	outer hypodermis
o.i.	outer integument
p.	pericarp
r.	radicle
rec.	receptacle
t.s.	transverse section

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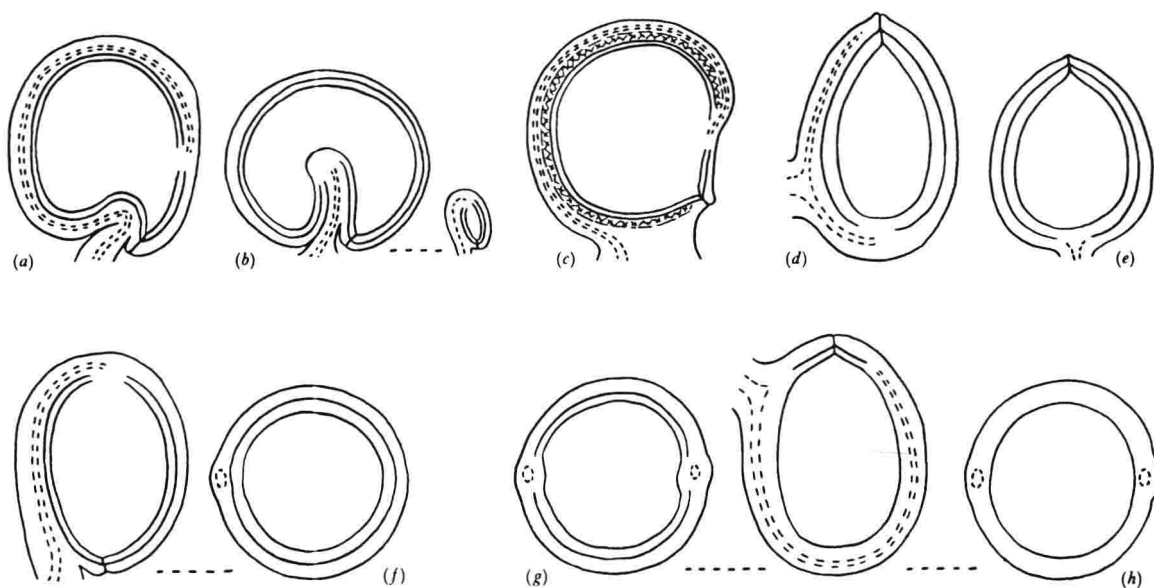
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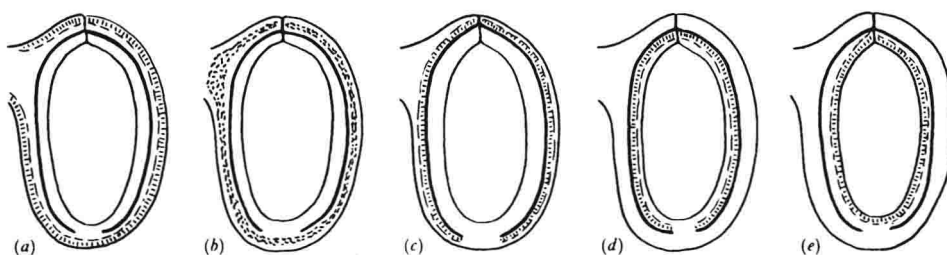
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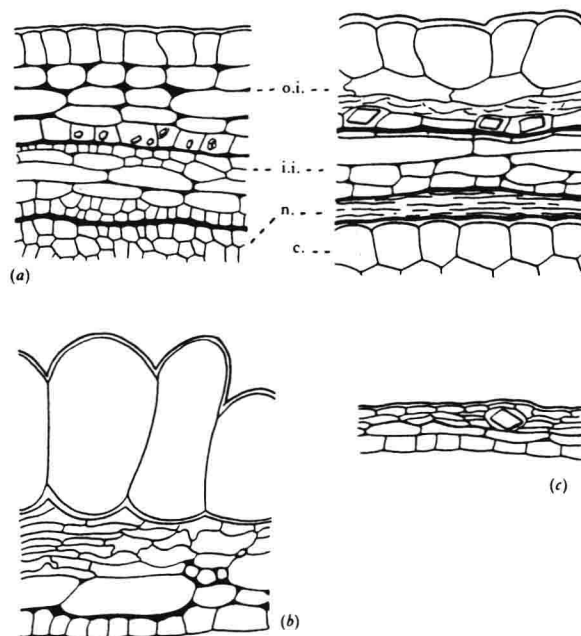
1 Seed-forms derived from the anatropous ovule, except (d) (hemianatropous) and (e) (orthotropous), showing testa, tegmen, and v.b. (a) the obcampylotropous with exaggerated raphe; (b) the campylotropous with exaggerated antiraphe; (c) the hilar seed with exaggerated hilum extending round most of the seed (as shown

by the tracheid bar in *Mucuna*); (d) the preraphe seed; (e) the orthotropous seed; (f) the anatropous seed with t.s.; (g) the perichalazal seed in t.s. and (h) the pachychalazal seed in t.s., both with similar l.s. (with free integuments at the micropylar end).



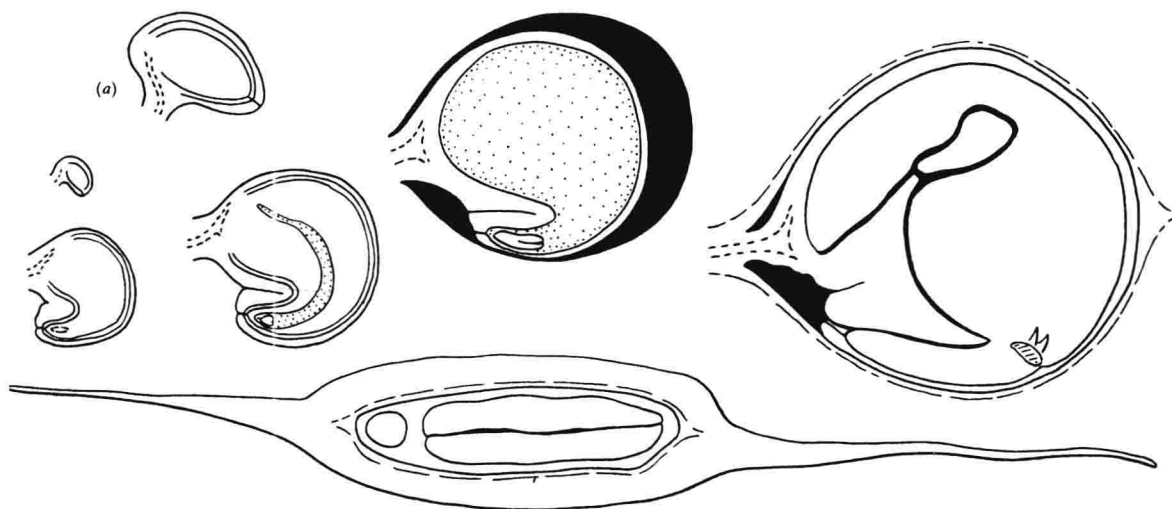
2 Diagrams of the main kinds of seed-structure, showing the testa and tegmen for an anatropous seed. (a) exo-

testal; (b) mesotegmic; (c) endotegmic; (d) exotegmic; (e) endotegmic.



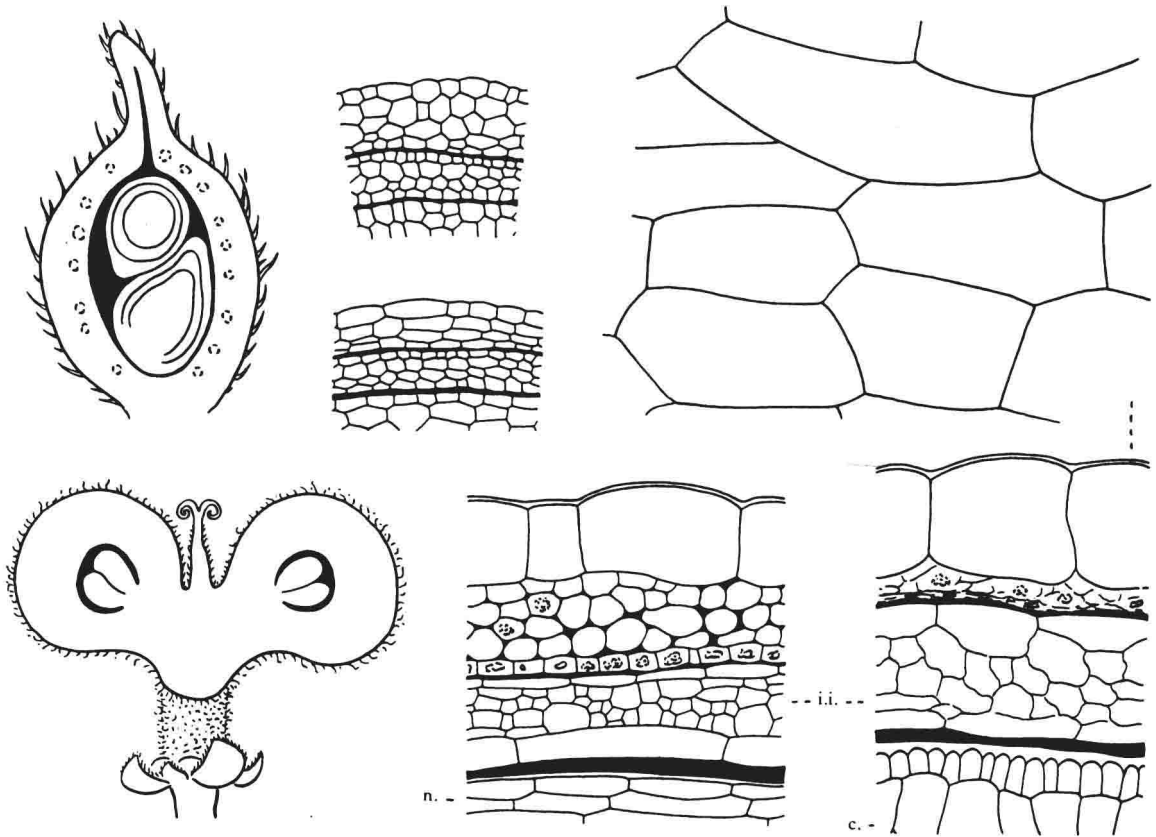
3 *Acer*, seed-coats in t.s., $\times 300$ (after Guérin 1901).
(a) *A. pseudoplatanus*, immature (left) with endotestal

crystals; c. cotyledon. (b) *A. pennsylvanicum*. (c) *A. negundo*.



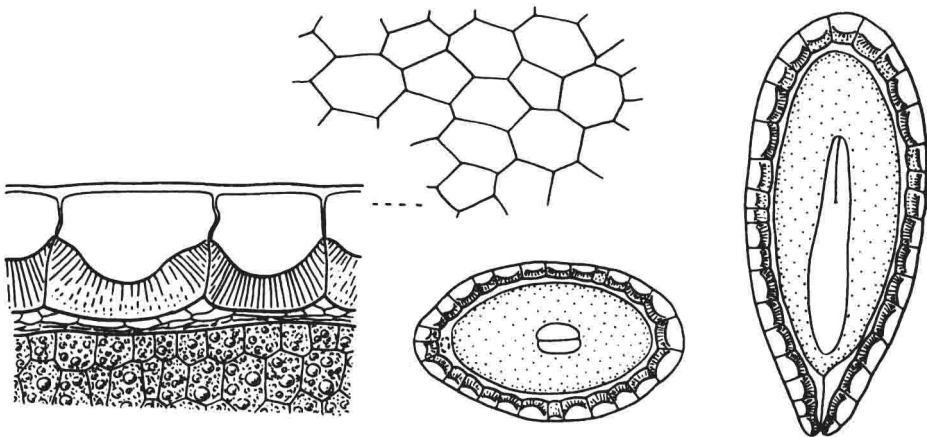
4 *Dipteronia sinensis*, (a) ovule in l.s. soon after fertilization, $\times 25$. Developing seeds in median l.s., mature seed

(right), $\times 8$. Fruit with seed in t.s., with thin woody endocarp, $\times 8$.

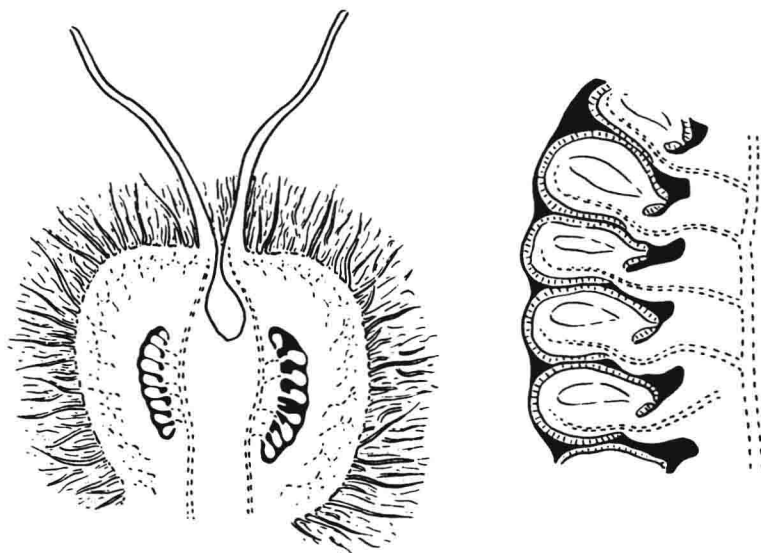


5 *Dipteronia sinensis*. Young fruit shortly after fertilization in l.s., $\times 8$; in t.s. of the follicle, $\times 25$. Wall of young

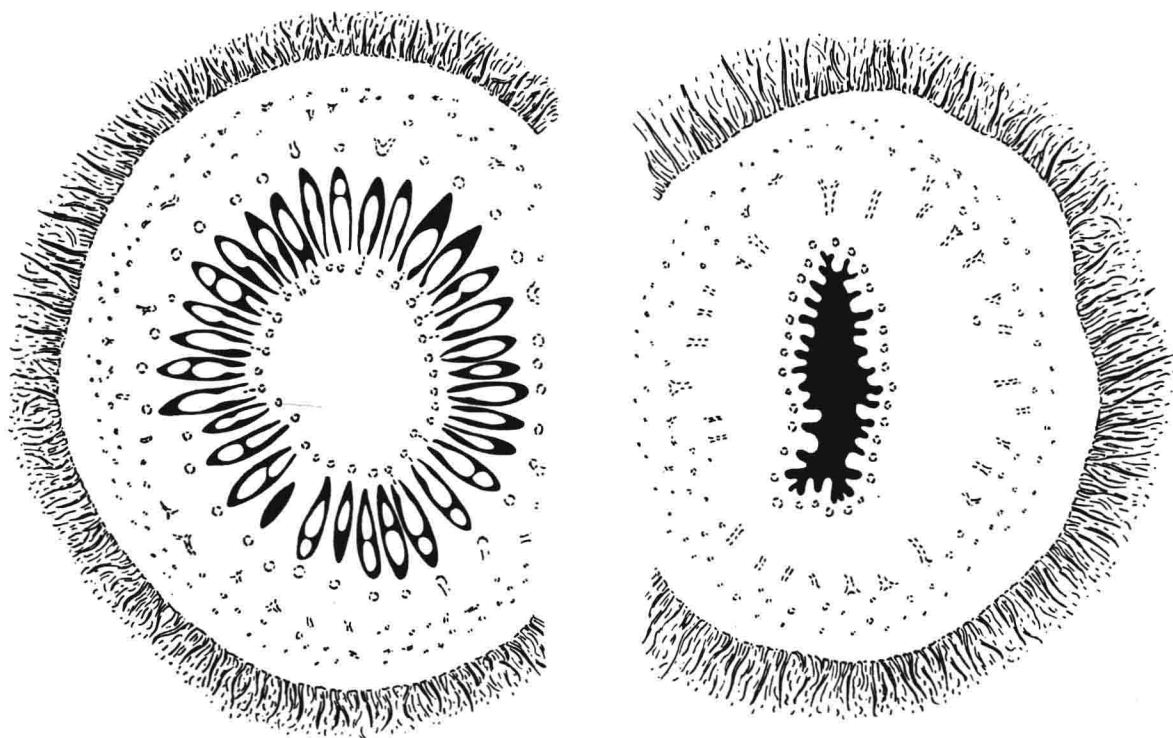
seeds soon after fertilization, of fully grown but immature seed, and of mature seed (lower right), $\times 200$.



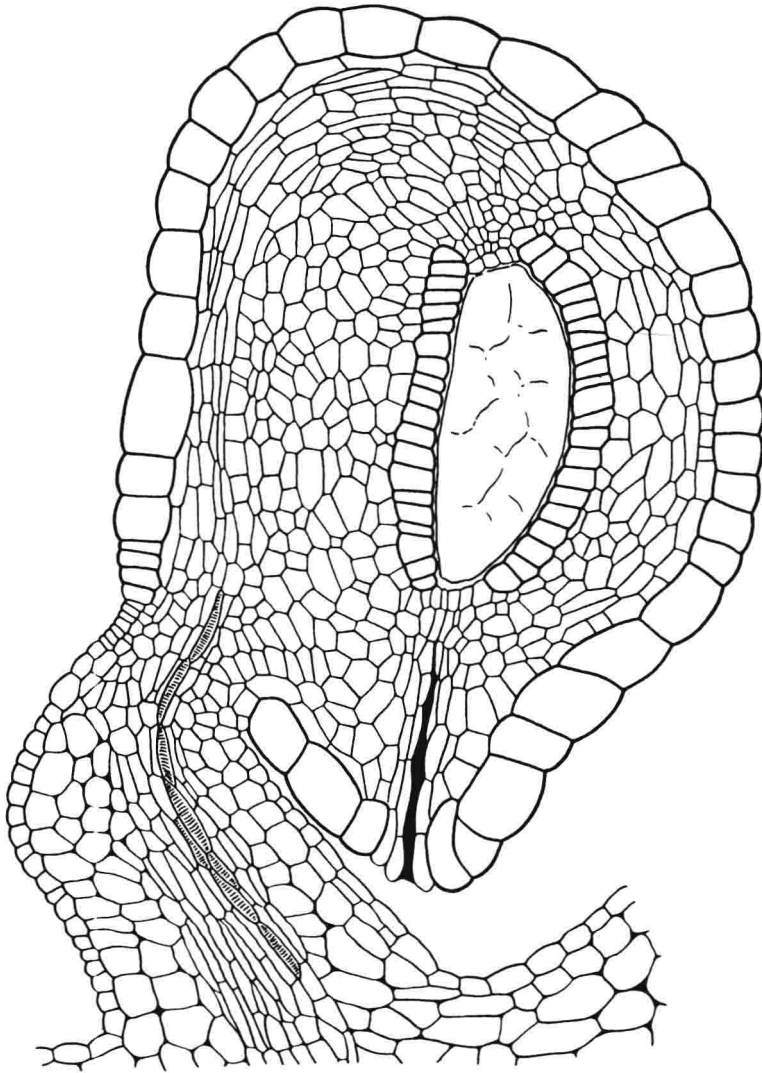
6 *Actinidia chinensis*. Seed in l.s. and t.s., $\times 25$. Seed-coat with endosperm in section, $\times 120$; o.e. facets, $\times 50$.



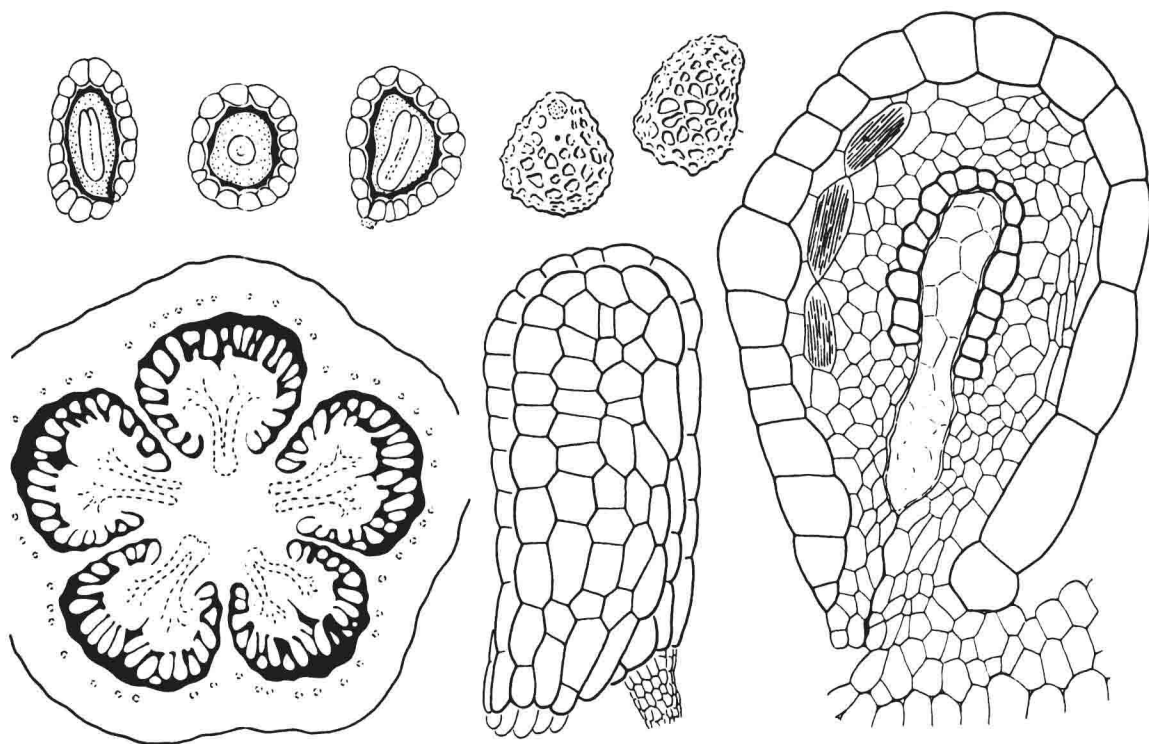
7 *Actinidia chinensis*. Ovary in l.s., $\times 5$. Ovules in l.s., $\times 25$.



8 *Actinidia chinensis*. Ovary in t.s. near the base and (right) at the base of the styles, $\times 10$.

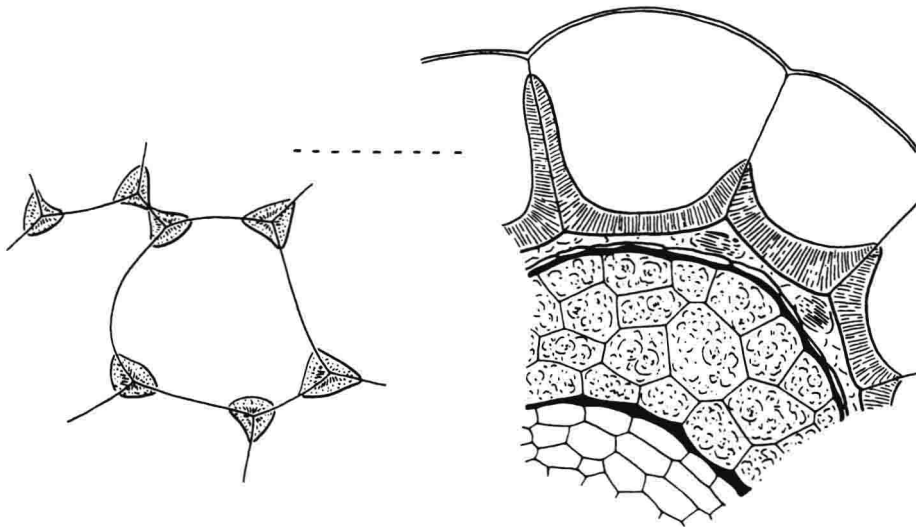


9 *Actinidia chinensis*. Ovule in l.s. shortly after fertilization, $\times 225$.

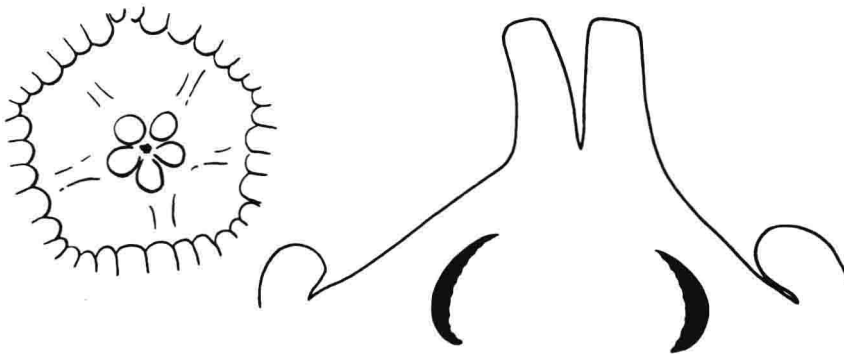


10 *Saurauia* sp. (RSNB 75). Ripe seeds in section and in surface-view of the hilum and side, $\times 25$. Ovary in t.s. at anthesis, $\times 18$. Ovule in surface-view and young seed

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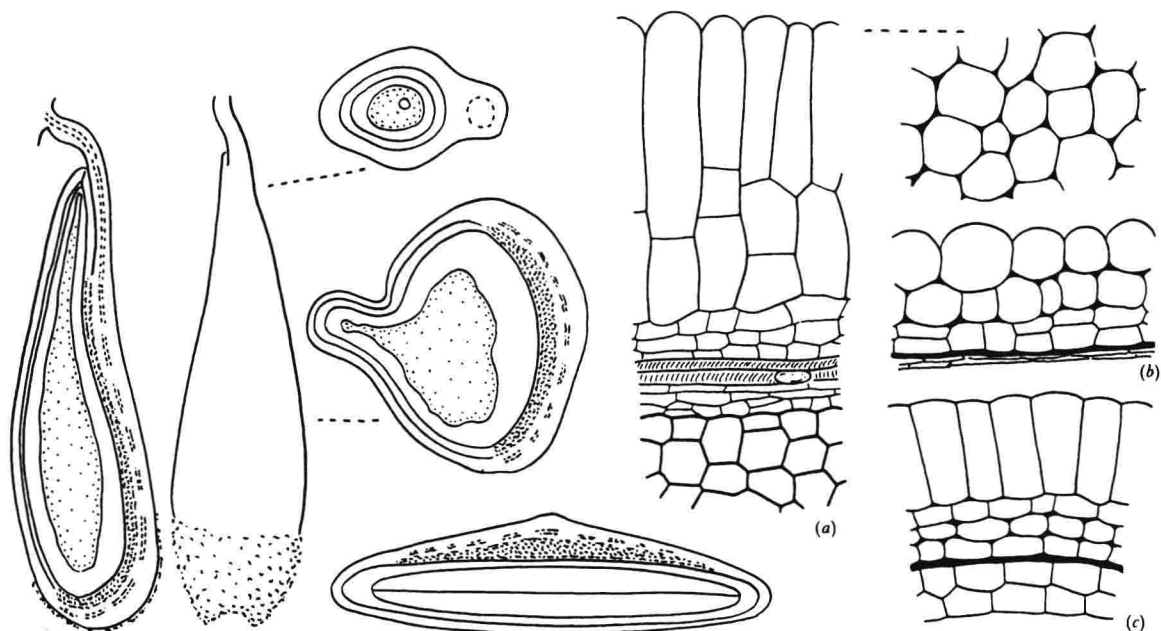


11 *Saurauia* sp. (RSNB 75). Ripe seed in t.s. with exotesta, raphid-cells, trace of endotesta, endosperm, and cotyledon-tissue, with facets of the exotesta, $\times 225$.



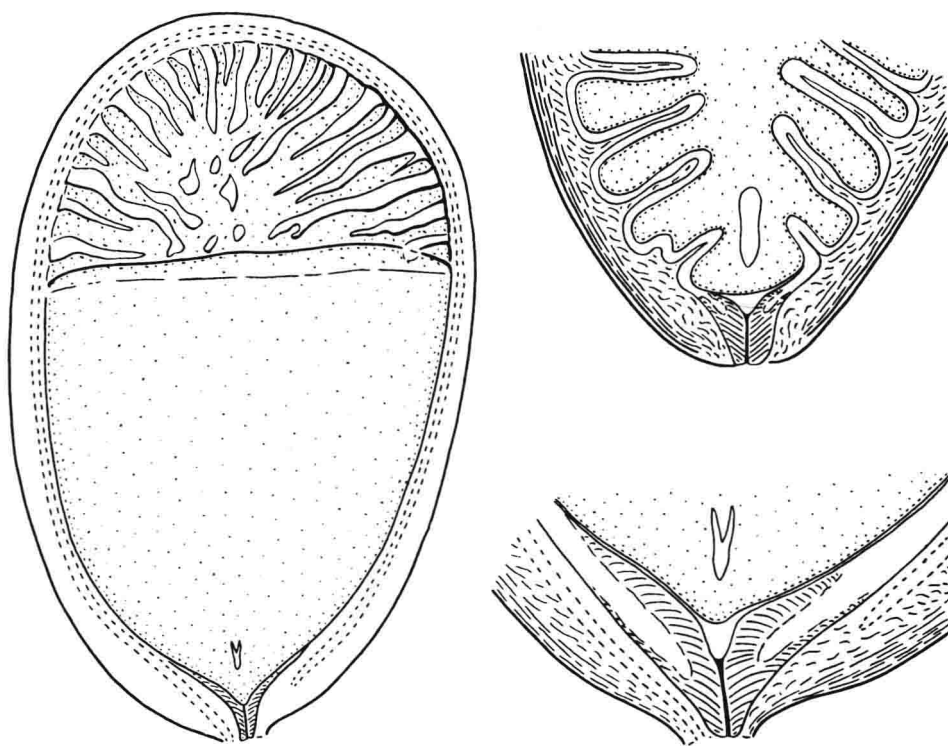
12 *Saurauia* sp. (RSNB 75). Ovary of very young flower-bud (left) with staminal ring and carpels just

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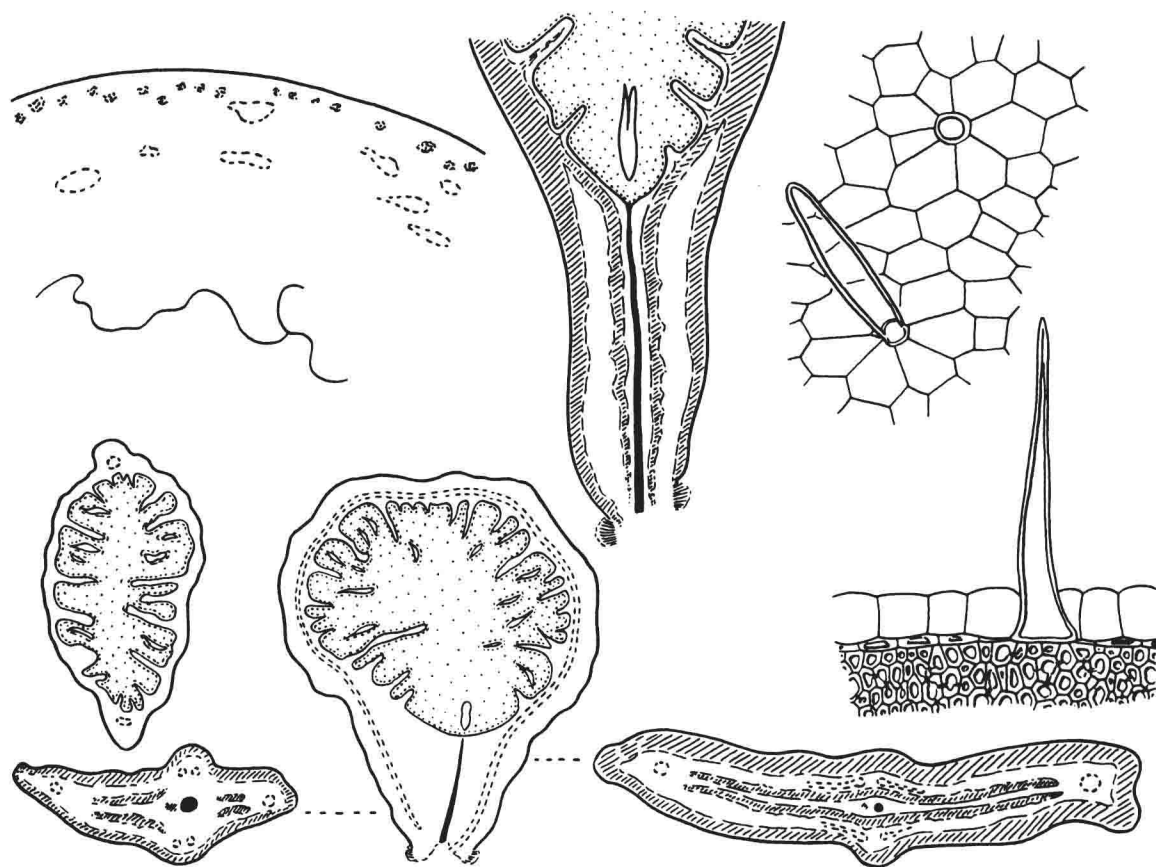


13 *Campnosperma minor*. Young seed in raphe-view and in l.s., with the extended hypostase stippled, $\times 12$; in t.s. $\times 25$. Fully grown but immature seed in t.s., showing the extensive hypostase (stippled) and thick testa before being crushed by the embryo, $\times 12$. Testa in t.s., $\times 225$;

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14 *Cyathocalyx carinatus*. Seed in median l.s., $\times 5$.
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15 *Goniothalamus* sp. (RSS 2302). Seed in l.s. and t.s.,
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