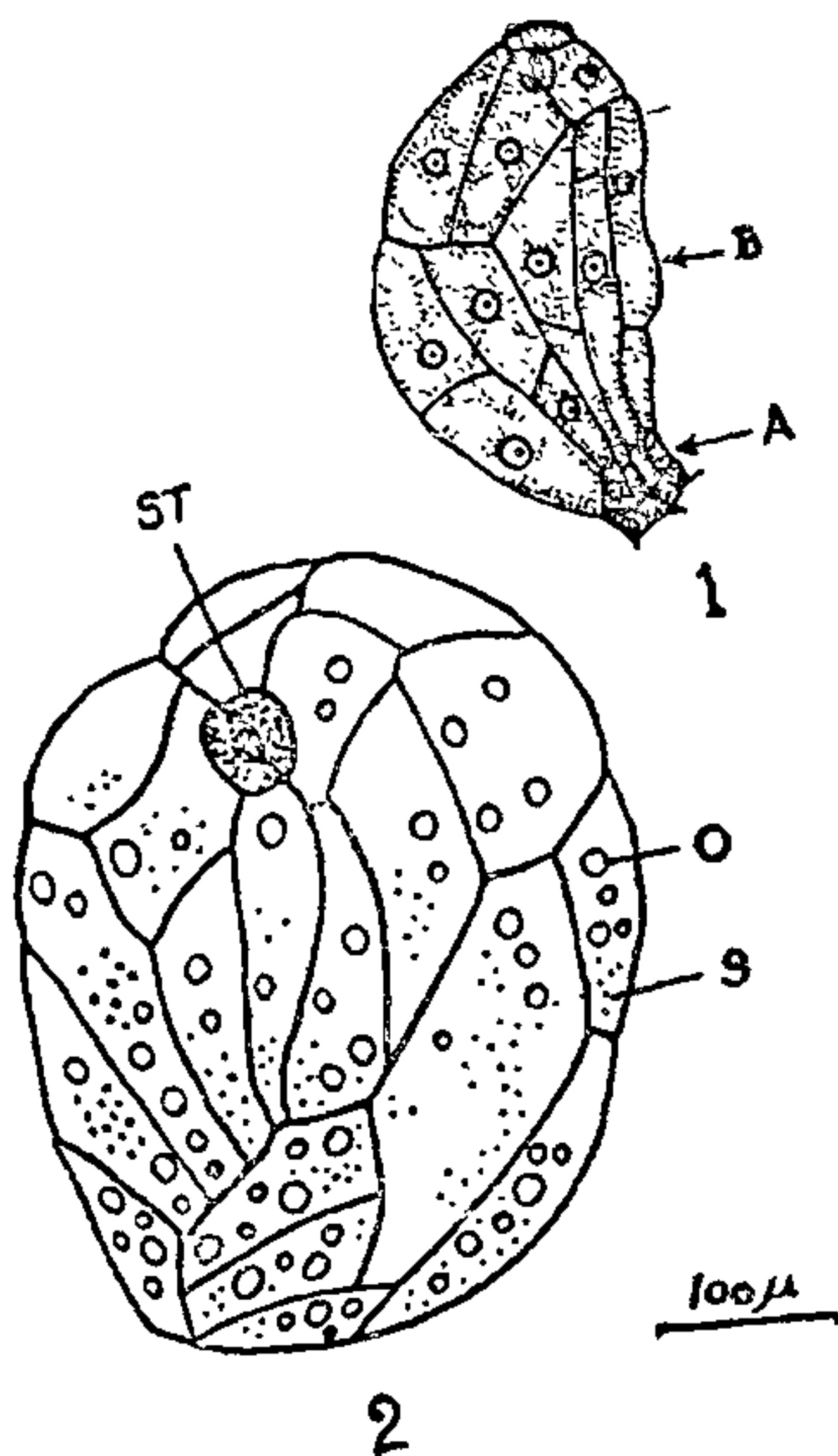


Pearl Glands in *Carica papaya* L.

The various types of pearl glands are reported in Ampelidaceae, Begoniaceae, Caesalpinaceae, Moraceae, Piperaceae, Sterculiaceae and Urticaceae¹. The development and structure of pearl gland is also reported in *Cayratia carnosae*² and *Polyalthia longifolia*³. As far as we are aware no such glands are reported in *Carica*. And incidentally this is the first report in the family Caricaceae.

In *C. papaya* the pearl glands are found near the ribs of lamina and on the petiole of young and old leaves, on the stem and the flowers. They are also present on small shoots appearing on the main trunk of *Carica*. The glands are small, lustrous and transparent structures appearing in rainy and winter seasons. They are multicellular, tiny spherical or elliptical and easily detachable structures. They are stalked or sessile. When stalked the stalk cells (A, Fig. 1) are smaller than the body cells (B, Fig. 1). Unlike in Vitaceae the glands are without



Figs. 1-2

epidermis³ but the stomata are present. There is a single terminal stoma with two guard cells containing granular starch (S, Fig. 2). All the large polygonal cells of the gland appear to be secretory. They contain minute starch grains (S), protein and oil globules (O) as judged by the microchemical tests. These cells have vacuolated cytoplasm and

nuclei. The glands vary from 333 μ m to 1000 μ m in height and 226 μ m to 453 μ m in diameter.

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A Leaf Spot Disease of *Pongamia glabra* Vent. Caused by *Trichothecium* (*Cephalothecium*) *roseum* (Pers.) Link ex Fries.

During the rainy season of 1973 a leaf spot disease of *Pongamia* was observed in the College of Agriculture Campus, KAU, Vellayani. The disease manifested in the form of circular to irregular brown necrotic spots on the young as well as on the mature leaves. The lesions gradually extended and involved a major portion of the lamina. The spots had a light brown centre and a dark margin with a conspicuous yellow halo.

A species of *Trichothecium* was repeatedly isolated in pure culture from the necrotic spots and its pathogenicity was established. The fungus on comparison agreed in all respects with *Trichothecium roseum* which has been recorded as a hyperparasite on *Puccinia graminis tritici* (Pers.) Frikss and Henn. (Sreekantiah and Joshi, 1958). It has been recorded as a parasite on sweet oranges causing fruit rot (Cheema and Jeyarajan, 1972), foliar rot of greenhouse cucumber (Mckeen, 1955) and leaf spot of *Kalanchoe pinnata* (Ponnappa, 1967). A perusal of literature indicated that *T. roseum* is a new record on *Pongamia glabra* Vent.

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