

EPSG newsletter

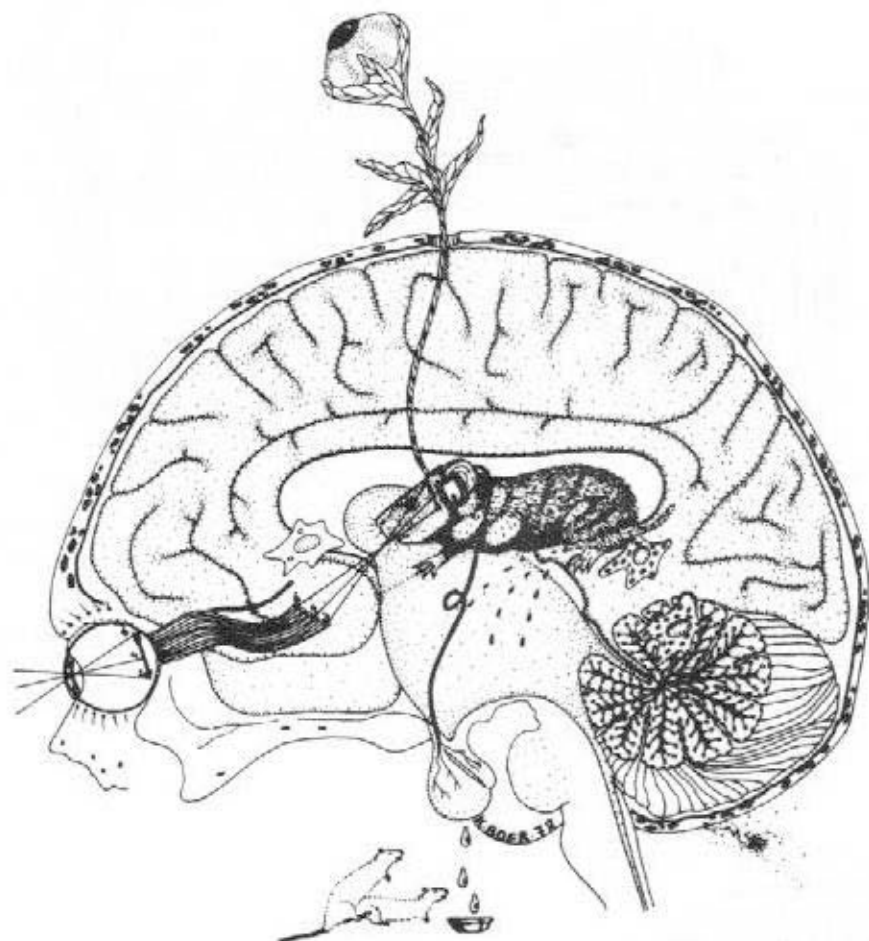
*Supplement 1*

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# FIRST COLLOQUIUM OF THE EUROPEAN PINEAL STUDY GROUP

AMSTERDAM - THE NETHERLANDS





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*The Pineal Gland of Vertebrates including Man*

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### **Perspectives in pineal functions.**

The main function of pineal body probably concerns the reproduction and other special cellular functions, particularly of bone marrow and neuroendocrine tissues.

These functions may be detected after a tolerably lasting latency, with moderate dosages ( $\leq$  mg 0,1 Kg b.w. of melatonin (MLT)). Some functions need being integrated by either Somatostatin, or  $\alpha$ 1-2- $\alpha$  bromocryptin (a synthetic inhibitor of prolactin secretion), as well as by ACTH and corticosteroids. MTL binds itself probably to specific sites of cellular membranes, of megacariocytes especially, with an ensuing platelet discharge. MLT can likewise interact with intracellular nucleotides and nucleosides (H-bond). The interactions of MLT with practically every somatic cell account for the general somatic, subjective and objective consequences of MLT treatment.

The administration of moderate doses of MLT to human beings, for periods lasting over five years, has never caused any trouble to appear, and has validly contributed in order that many blood diseases (trombocytopenia, thalassaemia, leukemia), and lung, bewel, uterus, etc., cancer had a more favorable course and prognosis.

Since MLT has no seemingly antitlastic action, some good results in malignant neoplastic diseases are conditioned by the simultaneous employment of moderate doses of antitlastic drugs, such as cyclophosphamide.