

NOTES ON THE MEETING OF THE PHYTOCHEMICAL SOCIETY
HELD AT THE SCHOOL OF PHARMACY, UNIVERSITY OF LONDON
ON THE 7th JANUARY 1969.

RECENT WORK ON PLANT PRODUCTS OF THERAPEUTIC INTEREST.

Dr. K. Jewers (Tropical Products Institute) lectured on anti-tumour agents, giving a historical introduction on the use of the antimetabolic, chemotherapeutic agents colchicine and the nitrogen mustards. A review of products currently being tested at T.P.I. followed, the test procedures involving mouse plasma cells and human pharynx carcinoma cells. Compounds discussed included the isoquinoline-, indole- and other alkaloids; sesquiterpene lactones; steroids, including cardiac glycosides; and oxygen heterocycles of the flavonoid, quinonoid and tannin types. Also mentioned were a variety of mould metabolites, mostly from Streptomycetes.

Derivatives of the opium alkaloids were discussed by Dr. K.W. Bentley (Reckitt & Son, Hull). These were analgesics, exhibiting modified addiction and withdrawal symptoms, based structurally on morphine and codeine. Synthetic routes to these derivatives involved Diels-Alder reactions on thebaine. It may be of interest to note that Dr. Bentley's biological testing of late has involved the elephant and rhinoceros.

In the absence of Professor K. Korte (University of Bonn), Professor Fairbairn (London School of Pharmacy) briefly summarised chemical work on cannabis and related compounds, while Dr. Chappell (Chelsea Clinic) discussed the clinical aspects.

Dr. W.M. Hollyhock (Committee on Safety of Drugs, London) talked on psychotomimetics as exemplified by the depersonalisation effect of L.S.D.

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An interesting investigation on the active principle of nutmeg revealed that whereas pure myristicin is extremely active in animals it is inert in man.

Dr. R. Hardman (University of Bath) reviewed those steroids mentioned in the 1968 British Pharmacopoeia, and discussed their partial synthesis in the Pharmaceutical Industry.

The final lecture from Professor Fairbairn reviewed the role of alkaloids in the plant. He showed that in certain Conium spp. and in Papaver somniferum the alkaloid content of the plant varies considerably between the times of flowering and of fruiting, and even in the course of each 24 hour period. Evidence was presented that the alkaloids may well function as part of the prosthetic group in coenzymes (c.f. nicotinamide).

Other interesting observations were the ability of latex to biosynthesise alkaloids from amino acids in vitro and the reduction in germination of seeds after removal of their alkaloids.

J.G. Underwood

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