

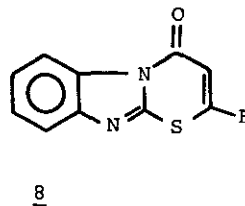
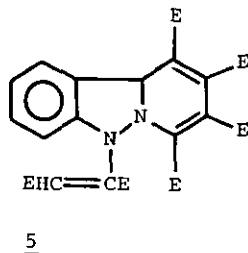
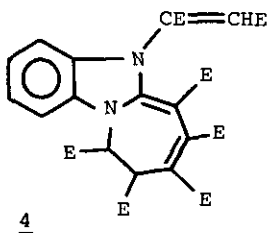
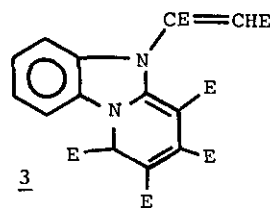
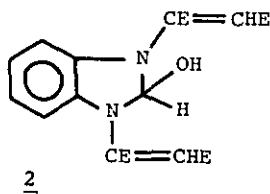
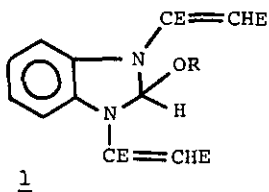
ADDITION REACTIONS OF CONDENSED AZOLE DERIVATIVES WITH DIMETHYL
ACETYLENEDICARBOXYLATE II

*Norio Kawahara, Takako Nakajima, ** Tsuneo Itoh and Haruo Ogura

* Hokkaido Institute of Pharmaceutical Sciences and ** School of
Pharmaceutical Sciences, Kitasato University

We obtained new results on treating of benzazole derivatives with Dimethyl acetylenedicarboxylate (DMAD) in alcohols at room temperature in the dark. Their structural assignments of the products are based on the satisfactory elemental analysis and several spectral data.

- 1) Benzimidazole derivatives reacted with DMAD to give 1:2:1 adduct (1, solvent adduct), 1:2:1 adduct (2, H₂O adduct) and compounds (3 and 4) containing six or seven membered ring.
- 2) Indazole and benzotriazole reacted with DMAD, respectively, to give a compound (5 and 6) containing six membered ring together with simple addition product.
- 3) 2-Amino (2-mercapto and 2-hydroxy) benzazoles reacted with DMAD to give novel addition products (7, 8 and 9).



E = COOCH₃