

[Chem. Pharm. Bull., **43**, 2253-2255 (1995)]

[Lab. of Pharmacognosy]

Clerodane diterpenoids from *Ajuga decumbens*.

CHEN HUAN-MING, MIN ZHI-DA, MUNEKAZU IINUMA*, TOSHIYUKI TANAKA

A new *neo*-clerodane diterpene, ajuagcumbin G, was isolated from *Ajuga decumbens* (Labiatae), and the structure was characterized as 6 α -acetoxy-4 α ,17-epoxy-18-(3'-hydroxy-2'-methylenebutyryloxy)-*neo*-clerodane-13-ene-15,16-olide by ¹H and ¹³C NMR spectral study and by comparison with the known compounds with halogen acid, HX (X= Cl, Br and I) and with Jones reagent were prepared to supply some samples with different substituents at C-4 for insect antifeedant examinations.

[Bio. Syst. Ecol., **23**, 539-545 (1995)]

[Lab. of Pharmacognosy]

Chemotaxonomic Approach to the Genus *Euchresta* Based on Prenyl-flavonoids and Prenylisoflavones in Roots of *Euchresta formosana*.

NOBUYASU MATSUURA, MUNEKAZU IINUMA*, TOSHIYUKI TANAKA, MIZUO MIZUNO

The distribution of prenylflavonoid compound in the genus *Euchresta* was surveyed and the chemotaxonomic value of these compounds assessed. A new prenyl flavanone, euchenone a_{10} , the separation of which has been unsuccessful up to now, was isolated from the roots of *Euchresta formosana* (Leguminosae) in addition to two known flavanones lupinifolin and sophoranochrome). By means of spectroscopic analysis, the structure of euchenone a_{10} was determined. Among known flavanones, sophoranochrome is unusual in having two C5-unit on the B-ring. Compounds di-prenylated on the B-ring such as sophoranochrome have been isolated from the genus *Euchresta* for the first time, and the chemotaxonomic value of this is evaluated.

[Tetrahedron Lett., **36**, 8985-8986 (1995)]

[Lab. of Pharmacognosy]

Xanthienopyran, A Novel Thienocyclopentapyran in Fruits of *Xanthium pungens*.AHMED, A. MAHMOUD, AHMED, A. AHMED, MUNEKAZU IINUMA*, TOSHIYUKI
TANAKA, YOSHIKAZU NAKAHASHI, HIROSHI NAGANAWA.

In previous paper, we characterized the structures of some sesquiterpenes in aerial parts of *Xanthium pungens* (Compositae). In continuation of our phytochemical research of Egyptian Compositaeous plant, we report here the isolation and structural elucidation of a novel sulfur-containing compound, xanthienopyran in the fruits of *X. pungens*. The structure of xanthienopyran was determined to 5-hydroxy-8-(6-hydroxy-1E,3E-hexadienyl)-2-methylthieno[3',2':4,5]cyclopenta-[1,2-c]pyran-6(8H)-one.