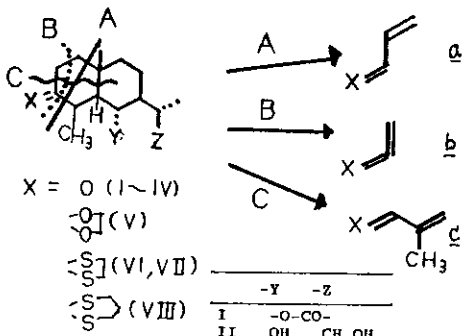
STEREOISOMERIC EFFECT IN ELECTRON IMPACT REACTION (EI/MS) OF COMPOUNDS HAVING SULFUR CONTAINING RING (DITHIOLANE AND DITHIANE)

Tetsuichi SHIBATA, Tamiko OHKURA and Seiichi INAYAMA
Pharmaceutical Institute, School of Medicine, Keio University
35 Shinanomachi, Shinjuku-ku, Tokyo 160, Japan

To examine the function of divalent sulfur for stereochemical recognition, tetrahydro-ℓ-α-santonin derivatives having acetal and dithioacetals (dithiolane and dithiane rings) at C_3 were prepared and impacted by electron beam (70 eV) resulting a specific fragmentation of A-type fission as shown Fig. 1.

A small stereospecific differences (4S > 4R and 5S < 5R) of relative intensity of fragment ions (b and c) caused by B- and C-types fission were obtained when A-type fission are dominant fragmentation of above compounds in the course of electron impact reaction at 70 eV.



	-Y	-Z
I	-O-CO-	
II	OH	CH_2OH
III	OH	$COOCH_3$
IV	OH	COOH
V	-O-CO-	
VI	-O-CO-	
VII	OH	CH_2OH
VIII	-O-CO-	

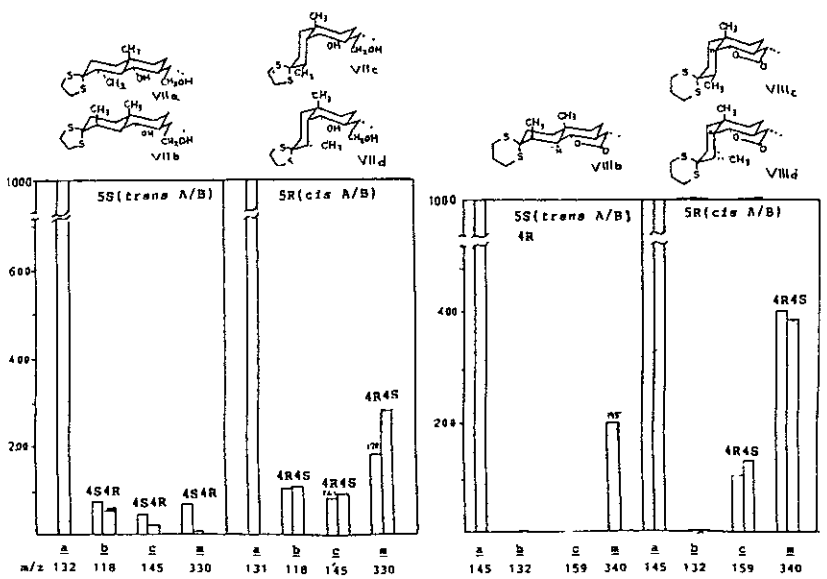



Fig. 1