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### A Model System: A Photochemical Interaction Between Heptachlor and the Surface Waxes of the Tomato Fruits

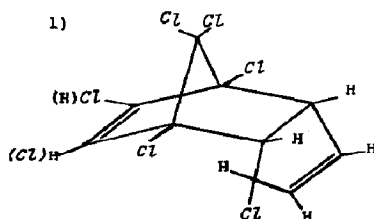
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The photochemical interaction of chlorinated hydrocarbons and surface waxes are of great environmental importance to man.

Photolysis at 310 nm for 5 days (the equi-

valent of 2 weeks of summer sunlight) of each  $C_{27}$  alkane and  $C_{27}$  ketone, each in the presence of heptachlor, acetone and benzene as the solvent, has been carried out. The resulting photoproducts were isolated and analyzed by GC and combined G.C. - M.S. Two monodechlorinated isomers (Structure #1) elute at 155 °C. At 280 °C, a multiplicity of radical-coupling dimers elute, either as dimers at  $C_1$  or  $C_3$  of the allyl chlorine of the cyclopentadiene fraction of the heptachlor molecule (Structures #2a and b).



Mono dechlorinated  
isomeric pairs

