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rearrangements

O 0140 49 - 051 New Synthesis of β -Lactams by Ethylene Extrusion from Spirocyclopropane Isoxazolidines. — A novel chemoselective reaction of spirocyclopropane isoxazolidines (I) and (IV) is presented. Heating of compounds (I) and (IV) in acidic solution proceeds with recyclization and ethylene extrusion to provide fused β -lactams (II) and (V), resp., in moderate yields. Side product of the rearrangement of compound (I) is derivative (III), while the corresponding ring-expanded product (VI) (as observed previously for thermal reaction of spirocyclopropane isoxazolidines under neutral conditions) is not detected. — (CORDERO, FRANCA M.; PISANESCHI, FEDERICA; GOTI, ANDREA; OLLIVIER, JEAN; SALAUEN, JACQUES; BRANDI, ALBERTO; J. Am. Chem. Soc. 122 (2000) 33, 8075-8076; Dip. Chim. Org. Ugo Schiff, Univ. Firenze, I-50121 Firenze, Italy; EN)

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