Ethenetetracarbonitrile and Heterocyclization of Symmetrical Dithiobiurea as well as Thioureidoethylthiourea Derivatives

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N,*N*'-Disubstituted hydrazinecarbothioamides 6a-c and substituted thioureidoethylthioureas 12a-c react with ethenetetracarbonitrile (TCNE) in ethyl acetate or chlorobenzene to form the derivatives of pyrazole 7, 8; thiadiazole 10, 11 thiadiazepine 9, thiadiazepane 13, imidazolidine 14 and diazepine 15.

Key words: Ethenetetracarbonitrile, Dithiobiurea, Thioureidoethylthiourea Derivatives, Heterocyclization