

تم استخدام ٢-استيل ثيوفين في تحضير العديد من المركبات الجديدة عن طريق التفاعل مع الداى اثيل اكسالات ثم الفينيل هيدرازين. ثم مفاعلة الناتج مع العديد من الكزاشف. تم استخدام طرق تقليدية سهلة و اثبات التركيب البنائى باستخدام التحاليل الدقيقة و الطيفية.

Phenyl-3-(2-thienyl)-1H-pyrazole-5-carbohydrazide 4 was ١ prepared from 2-acetylthio- phene by reaction with diethyl oxalate and phenylhydrazine followed by hydrazine hydrate. The reaction of the hydrazide 4 with phthalic anhydride, aromatic aldehydes, and alkene derivatives gave imide 5, hydrazones 6a-d, and bis-pyrazoles 7 and 8, respectively, while its reaction with phenyl isothiocyanate led to thiosemicarbazide 9. The reaction of the latter with ethyl bromoacetate and phenacylbromide afforded 4-thiazolidinone 10 and 1,3-thiazole 11 derivatives, respectively. Reaction of 4 with carbon disulfide in the presence of potassium hydroxide gave potassium hydrazinecarbodithioate derivative 12, which was used as a starting material in the preparation of 2-thioxothiazol-3(2H)-yl)-5-(2-thienyl)-1H-pyrazole-3-carboxamide 14; 1,3,4-thiadiazol-2(3H)-ylidene)-1-phenyl-5-(2-thienyl)-1H-pyrazole-3- carbohydrazides 16a-c; 4-amino-5-thioxo-4,5-dihydro-1H-1,2,4-triazol-3-yl) pyrazole derivative 13; Schiff bases 17a,b; and 1,2,4-triazolo[3,4-b][1,3,4] thiadiazine derivatives 18 and 19a-e