out. These crystals were filtered, washed with water and dried.

### *c. Synthesis of 3-methyl-4-(substituted phenyl hydrazono)-pyrazoline-5-one (III)*

3-methyl-4-(4|-substituted phenyl hydrazono)-pyrozoline-5-one (**III**) was synthesized by thecondensation of 4-substituted phenyl hydrazono acetoacetic ester (**II**) and hydrazine in the presence of required amounts of dimethylformamide. The mixture was subjected to microwave irradiation at 150W intermittently at 30 sec intervals for 2 minutes. After complete conversion as indicated by TLC, the reaction mixture was cooled and washed with cold water. The precipitated **III** was filtered recrystallized from ethanol.

### *d.Synthesis of {4-[3-Methyl-5-oxo-4-(substituted phenyl hydrazono)-4,5-dihydro-pyrazol-1-yl]-phenoxy- acetic acid ethyl ester (IV)*

A mixture of **III**, anhydrous $K_2CO_3$ and DMF was stirred at room temperature for 8 hours. The reaction mixture was diluted with ice cold water. The separated solid was filtered and recrystallized from ethanol.

### *e. Synthesis of {4-[3-Methyl-5-oxo-4-(4|-aryl-hydrazono)-4,5-dihydro-pyrazol-1-yl]-phenoxy}-acetic acid hydrazides (V)*

A mixture of **IV** and hydrazine hydrate in ethanol was refluxed for five hours. The reaction mixture was cooled to room temperature and poured in ice cold water with continuous stirring. The separated solid was filtered, washed with water and recrystallized from ethanol. Other members of the series **V**were prepared on the same lines. The reaction scheme is depicted in Scheme **1.**

### *2.1.2. Synthesis of 2-(4-acetyl- -5,5-disubstituted 4,5-dihydro-[1,3,4]oxadiazole-2-yl(methyloxyphenyl)-5-methyl-4(aryl hydrazono)- -pyrazol-3-ones (VII)*

### *a. Synthesis of {4-[3- methyl- 5- oxo- 4-(4|-phenyl hydrazono)- 4,5-dihydro-pyrazol-1-yl]-phenoxy}-acetic acid (1-phenyl-ethylidene)-hydrazide (VI)*

A mixture of **V** (0.01 mol) in hot methanol (25 mL), acetophenone (0.01 mol) and a drop of glacial acetic acid were refluxed for 3 hours. The solid separated was filtered, washed with cold methanol and recrystallized from methanol to give **VI**a. Compounds **VI** b-h were synthesized on similar lines.

### *b. Synthesis of 2-(4-acetyl-5,5-disubstituted 4,5-dihydro-[1,3,4]oxadiazole-2-yl(methyloxyphenyl)-5-methyl-4(4|-substituted phenyl hydrazono)-pyrazol-3-ones (VII)*

A mixture of **VI**a (0.01 mol) and an excess of acetic anhydride (10 mL) were refluxed for 2 hours. The excess acetic anhydride was distilled off and the residue was poured on to crushed ice. The solid obtained was filtered, washed with water and recrystallized from aqueous methanol to get **VII**a. The cyclization reaction was extended to other hydrazones **VI** b–j and in each case the respective compound was isolated. The reaction scheme is given in Scheme **2**.