Aim of the work

Many studies were carried out on the spectrophotometric behaviour of coumarin compounds in drug or rodenticide forms. Warfarin as example for drugs and bromadiolone as example for rodenticides were chosen for these studies. The aim of the present investigation is to carry out studies on the possibility of using bromophenol blue, bromocrysol green, bromocrysol purple, bromothymol blue and fast blue as analytical reagents for spectrophotometric determination of coumarins. The stoichiometric ratio and stability of the formed complexes were determined spectrophotometrically. The present work aims also to investigate the optimum conditions of determining the studied drugs in pure and in dosage forms and the optimum spectral methods for determining the stability constant of the complexes formed. Analytical applications for determining the studied compounds in dosage forms produced in Egypt was also aimed without interferences from excipientsor additives usually present in drug formulations. Also determining the studied compounds in rodenticides that producd locally in Egypt was also aimed without interferences from the additives usually present in these formulations.