



49312322 : MAJOR : FORENSIC SCIENCE  
KEYWORD : DOG, HAIR, MEDULLA, CUTICLE, CORTEX, MICROSCOPE  
PIROM RUANGRIT: COMPARATIVE STUDIES ON PHYSICAL  
CHARACTERISTICS OF HAIRS FROM DOGS COMMONLY RAISED IN THAILAND USING  
LIGHT MICROSCOPE AND SCANNING ELECTRON MICROSCOPE. THESIS  
ADVISOR: ASSOC. PROF. Ph.D THANIT PEWNIM, ASSOC. PROF. POL.COL. Ph.D.  
PATCHARA SINLOYMA, AND POL.LT.COL.SARIT SEUBPONGSIRI 75 PP.

The objective of this study is to carry out comparative studies on physical characteristics of hairs from dogs commonly raised in Thailand using a light microscope and a scanning electron microscope. The comparative studies were extended to include hairs from a cat strain. It is anticipated that the profiling of hairs from dogs as well as the cat has a potential use in forensic science. It was found that the physical characteristics of hairs from dogs were significantly different from the cat. The cuticles from the Thai Ride Back exhibited wave-like patterns of a regular wave type with a flower petal characteristic of the narrow petal diamond type. Further examination of the cross section of the hairs from the Thai Ride Back revealed the oval medium size medulla. Cross section of hairs from the Pomeranian showed circular medium size medulla, while the cuticle exhibited a wave-like characteristic. Examination of medulla from cats revealed a hollow type medulla, while the cuticles were of a broad petal type.

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Thesis Advisor's signature 1.....2.....3.....