TABLE OF CONTENTS

GENERAL INTRODUCTION	-
Utetheisa oruntrix	. 3
Photuris versicolor	5
Appendices	8
References	11
PART I: Utetheisa ornatrix	13
CHAPTER ONE: Sexually transmitted chemical defense in a r	moth (<i>Utetheisa</i>
ormatrix)	
Introduction	1.1
Materials and Methods	15
Results	19
Discussion	27
Appendix	32
References	33
PART II: Photuris versicolor	35
CHAPTER TWO: Metabolic transformations of acquired lucil	bufagins by
firefly "femmes fatales"	
Introduction	37
Materials and Methods	38
Results and Conclusions	43
Discussion	59
References	61

CHAPTER THREE: N-methylquinolinium 2-carboxylate, a defensive beta	ine
from Photuris versicolor fireflies	
Introduction	63
Materials and Methods	.64
Results and Discussion	66
References	72
CHAPTER FOUR: Endogenous production of N-methylquinolinium 2- carboxylate by <i>Photuris</i> firefly larvae	
Introduction	74
Materials and Methods	75
Results and Discussion	76
References	84
CHAPTER FIVE: Chemical egg defense in <i>Photuris</i> "femmes fatales"	
Introduction	86
Materials and Methods	88
Results and Conclusions	96
Discussion	109

References

113