## LIST OF FIGURES

FIGURE	TITLE	PAGE
NO.		NO.
1.	Ctenops nobilis	1
2.	Sampling sites of C. nobilis	7
3.	Fish catching with bamboo trap	8
4.	Experimental sites of the research work	9
5.	Testing the water quality parameters in laboratory	11
6.	Length and weight data collection of the fish	12
7.	Live fish food culture	13
8.	Proximate analysis of live fish food organisms	15
9.	Geographical distribution of C. nobilis	23
10.	Geographical distribution evaluated by IUCN	23
11.	Morphometric data collection of C. nobilis	33
12.	Different Morphometric parameters of the fish	33
13.	Ctenoid scale of C. nobilis	35
14.	Relationship of Standards length with body depth,	39
	body width, head length, head width and caudal	
	peduncle length	
15.	X-Ray image of <i>C. nobilis</i> showing skeleton structure	40
16.	Gill structure of C. nobilis	41
17.	The accessory respiratory labyrinth organ of C.	42
	nobilis	
18.	Length wise Growth curve of C. nobilis	47
19.	Weight wise Growth curve of C. nobilis	48
20.	Length frequency distribution curve of C. nobilis	49
21.	Scatter diagram depicting TL, SL and WT	59
	relationship of C. nobilis (logarithmic scale) for	
	combined group	
	a) TL-WT relationship	
	b) SL-WT relationship	
	c) TL-SL relationship	
22.	Scatter diagram depicting TL, SL and WT	62
	relationship of C. nobilis (logarithmic scale) for ripe	
	male	
	a) TL-WT relationship	
	b) SL-WT relationship	
	c) TL-SL relationship	
23.	Scatter diagram depicting TL, SL and WT	66
	relationship of <i>C. nobilis</i> (logarithmic scale) for ripe	

	female	
	a) TL-WT relationship	
	b) SL-WT relationship	
	c) TL-SL relationship	
24.	Scatter diagram depicting TL, SL and WT	68
	relationship of C. nobilis (logarithmic scale) during	
	Pre-monsoon:	
	a) TL-WT relationship	
	b) SL-WT relationship	
	c) TL-SL relationship	
25.	Scatter diagram depicting TL, SL and WT	70
	relationship of C. nobilis (logarithmic scale) during	
	monsoon:	
	a) TL-WT relationship	
	b) SL-WT relationship	
	c) TL-SL relationship	
26.	Scatter diagram depicting TL, SL and WT	72
	relationship of C. nobilis (logarithmic scale) during	
	post-monsoon:	
	a) TL-WT relationship	
	b) SL-WT relationship	
	c) TL-SL relationship	
27.	Scatter diagram depicting TL, SL and WT	73
	relationship of C. nobilis (logarithmic scale) during	
	winter:	
	a) TL-WT relationship	
	b) SL-WT relationship	
	c) TL-SL relationship	
28.	Scatter diagram depicting TL-WT of relationship of	75-76
	C. nobilis (logarithmic scale) of different size group:	
	a) 22-47 mm length	
	b) 48-55 mm length	
	c) 56-69 mm length	
	d) 70-100 mm length	
29.	Seasonal variation of Condition factor and relative	77
	condition factor of C. nobilis	
30.	Natural availability site of C. nobilis	80
31.	Setting of thermostat for temperature intervention	83
	study	
32.	Preferred habitat arrangements of C. nobilis	85
33.	Changes of SGR and K value with temperature	86
	change for <i>C. nobilis</i>	
34.	Experimental setup for feeding intervention of C.	91

	nobilis	
35.	Mouth position of C. nobilis	92
36.	Structure of gill of C. nobilis	93
37.	Structure of alimentary canal of the fish	93
38.	Percentage of occurrence of different food items in	94
	gut	
39.	Different types of foods given in captive condition	95
40.	Length group wise average RLG values in C. nobilis	97
41.	The length of intestine (IL) plotted against the total	99
	length of fish (TL) of C. nobilis	
42.	Month wise trend of Gastro-somatic index of C.	99
	nobilis	
43.	Length and weight data collection of the gonad	103
44.	Sexual dimorphism of C. nobilis	105
45.	Different stages of gonad of C. nobilis	108
46.	Month wise trend in the Gonadosomatic index C.	108
	nobilis	
47.	Seasonal changes of mean GSI C. nobilis	109
48.	Ova diameter of <i>C. nobilis</i>	109
49.	Fecundity and Total length of the fish relationship in	110
	C. nobilis	
50.	Fecundity and total weight of the fish relationship in	111
	C. nobilis	
51.	Fecundity and ovary weight relationship in C. nobilis	111
52.	Fecundity and ovary length relationship in C. nobilis	112
53.	Ovary length and fish length relationship in C.	113
	nobilis	
54.	Ovary weight and fish weight relationship in C.	113
	nobilis	
55.	Experimental design of Gonadal maturation of C.	116
	nobilis with feeding intervention	
56.	Brooder selection of C. nobilis from rearing tank	117
57.	Breeding tank setup of the C. nobilis	118
58.	Matured female C. nobilis	119
59.	Different stages of mating of C. nobilis	119
60.	Mouth breeding behavious of C. nobilis	120
61.	Length of spat out larvae	121
62.	Microscopic view of the larvae	122
63.	Different days old larvae come out from parent	122
64.	Haul of C. nobilis after 4 and 9 months of rearing	123