

C O N T E N T S

PART - I (TAXONOMY)

	<u>Pages</u>
INTRODUCTION ...	1 - 12
MATERIALS AND METHODS ...	13 - 18
A. Topography of breeding sites ...	13
B. Collection from breeding grounds ...	16
C. Association of larva with pupa ...	16
D. Rearing of pupa ...	17
E. Preparation of microscopical slides ...	18
DISPOSITION OF TYPE MATERIAL ...	19
CHARACTERISTICS OF THE FAMILY SIMULIIDAE IN RELATION TO KEYS AND DESCRIPTIONS IN- CORPORATED IN THIS STUDY ...	20 - 27
KEY TO THE SUBFAMILIES AND TRIBES OF THE WORLD ...	28 - 29
KEY TO THE SPECIES OF <u>SIMULIUM</u> IN THE DARJEELING AREA ...	30 - 39
GENERIC DIAGNOSIS ...	40 - 42
SUBGENERIC DIAGNOSES AND DESCRIPTIONS OF SPECIES ...	43 -100

	<u>Pages</u>
Subgenus <u>Eusimulium</u> Roubaud	43 - 72
Diagnosis	44 - 46
Descriptions of species	46 - 72
1. <u>praelargum</u> n.sp.	46
2. <u>gracilis</u> n.sp.	51
3. <u>purii</u> n.sp.	56
4. <u>nemorivagum</u> n.sp.	61
5. Species A	65
6. Species B	66
7. Species C	68
8. Species D	70
9. <u>rufithorax</u> Brunetti	72
Subgenus <u>Simulium</u> Latreille	73 - 86
Diagnosis	74 - 76
Descriptions of species	76 - 86
10. <u>nigrifacies</u> n.sp.	76
11. <u>himalayense</u> Puri	80
12. <u>rufibasis</u> Brunetti	82
13. <u>dentatum</u> Puri	83
14. <u>grisescens</u> Brunetti	85
Subgenus <u>Gomphostilbia</u> Enderlein	87 -100
Diagnosis	87 - 88
Descriptions of species	88 -100
15. <u>tenuistylum</u> n.sp.	88
16. <u>darjeelingense</u> n.sp.	94
17. <u>metatarsale</u> Brunetti	99

		<u>Pages</u>
DISCUSSION	...	101 - 115
SUMMARY	...	116 - 117
REFERENCES	...	118 - 127
 <u>PART - II (BIONOMICS)</u> 		
INTRODUCTION	...	128 - 131
Work done abroad	...	128
Work done in India	...	130
MATERIALS AND METHODS	...	132 - 134
Description of the light trap and its operation	...	132
Description of the trapping site	...	134
STUDY OF EFFICACY OF LIGHT TRAP AS SAMPLING DEVICE FOR BLACK FLIES	...	135 - 149
Introduction	...	135
Method	...	136
Result	...	136
Discussion	...	146
Summary	...	149
RELATIVE ABUNDANCE	...	150 - 156
Introduction	...	150

		<u>Pages</u>
Method	...	150
Result	...	151
Discussion	...	154
Summary	...	155
SEASONAL INCIDENCE AND SUCCESSION	...	157 - 173
Introduction	...	157
Method	...	157
Observations	...	158
(a) Seasonal incidence in 1968	...	158
(b) Seasonal incidence in 1969	...	160
(c) Seasonal incidence in 1970	...	163
(d) Seasonal incidence in average	...	165
(e) Seasonal Succession	...	167
Discussion	...	169
Summary	...	172
SEX-RATIO	...	174 - 181
Introduction	...	174
Method	...	175
Result	...	175
Discussion	...	178
Summary	...	180

		<u>Pages</u>
INTERNAL CONDITIONS OF TRAPPED FEMALES	...	182 - 189
Introduction	...	182
Methods	...	182
Observations	...	183
Discussion	...	188
Summary	...	189
HOST PREFERENCE	...	190 - 199
Introduction	...	190
Methods	...	191
Observations	...	192
Discussion	...	195
Summary	...	198
NOCTURNAL PERIODICITY	...	200 - 208
Introduction	...	200
Methods	...	200
Observations	...	201
Discussion	...	206
Summary	...	208
PHOTOPHILIC BEHAVIOUR	...	209 - 218
Introduction	...	209
Methods	...	209

		<u>Pages</u>
Observations	...	210
Discussion	...	216
Summary	...	218
REFERENCES	...	219 - 230
