

A CONTRIBUTION TO THE KNOWLEDGE OF BLOWFLIES (Diptera, Calliphoridae) OF THE SOUTHERN PART OF THE ALPS (Tessin, Switzerland)

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Fig. 1. Study area.

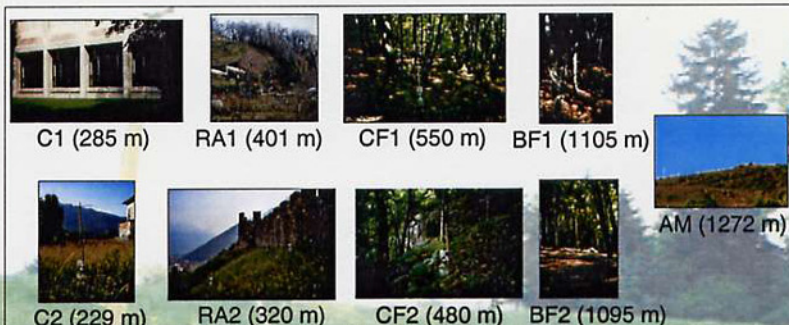


Fig. 2. The 9 stations and their respective altitude (C: City, RA: Ruderal Area, CF: Chestnut Forest, BF: Beech Forest, AM: Alpine Meadows)

> For each station: 4 days of trapping during the study (August – October 2002)

> Total: 4 x 9 stations = 36 days of trapping

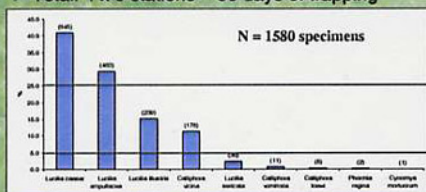


Fig. 3. Percentage and number of blowfly species (Calliphoridae) collected.

Table 1. Species and number (and %) of individuals trapped for each station.

	Lagano	Belinzone	Pregrana	Montebello	Cuira	Sasso Corbaro	M. Garenno	M. Bar	M. Bar	TOT.
	C1	C2	RA1	RA2	CF1	CF2	BF1	BF2	AM	
<i>Lucilia caesar</i>	85 (37.7%)	25 (4.7%)	83 (48.3%)	24 (55.8%)	22 (17.3%)	25 (16.4%)	6 (30%)	3 (10.3%)	2 (66.7%)	645 (40.8%)
<i>Lucilia ampullacea</i>	107 (33.6%)	88 (17.6%)	46 (17.2%)	-	73 (37.5%)	82 (67.8%)	5 (25%)	2 (6.9%)	-	463 (29.3%)
<i>Lucilia illustris</i>	39 (8.9%)	14 (26.8%)	6 (2.2%)	5 (11.6%)	28 (22.0%)	8 (12.5%)	2 (10%)	6 (20.7%)	-	239 (15.1%)
<i>Calliphora vicina</i>	83 (18.9%)	28 (5.6%)	32 (11.9%)	8 (18.6%)	4 (3.8%)	6 (3.9%)	2 (10%)	1 (48.3%)	1 (33.3%)	178 (11.3%)
<i>Lucilia sericata</i>	3 (0.7%)	31 (6.2%)	1 (0.4%)	1 (2.3%)	-	-	-	-	-	36 (2.3%)
<i>Calliphora vomitoria</i>	1 (0.2%)	1 (0.2%)	-	-	-	-	5 (25%)	4 (13.3%)	-	10 (0.7%)
<i>Calliphora vicina</i>	-	3 (0.6%)	-	2 (4.7%)	-	-	-	-	-	5 (0.3%)
<i>Phormia regina</i>	-	-	-	2 (4.7%)	-	-	-	-	-	2 (0.1%)
<i>Cynomya mortuorum</i>	-	-	-	1 (2.3%)	-	-	-	-	-	1 (0.1%)
TOT.	438 (27.7%)	500 (31.6%)	268 (16.9%)	43 (2.7%)	127 (8.0%)	152 (9.6%)	20 (1.3%)	29 (1.8%)	3 (0.2%)	1580 (100%)
Species	6	7	5	7	4	4	5	5	2	9 species

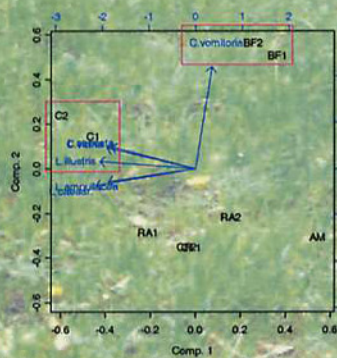


Fig. 4. Multivariate analysis (PCA corr) (Comp.1 = 62.3% of total variance explained, Comp.2 = 17.9%).

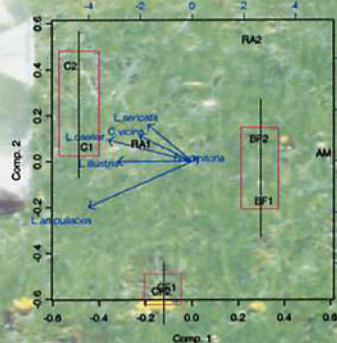


Fig. 5. Multivariate analysis (PCA cov) (Comp.1 = 73.8% of total variance explained, Comp.2 = 12.1%).

Comments

- > Tessin is characterized by 9 species of blowflies for the concerned time of the year (August to October)
- > Landscape structures are characterized by the presence of particular species (i.e. *C. vomitoria* in beech forest)
- > Stations with similar landscape structures are very close in composition and abundance of species
- > This study allows comparison with areas north of the Alps (i.e. *Cynomya mortuorum* less abundant; *Lucilia silvarum* absent)