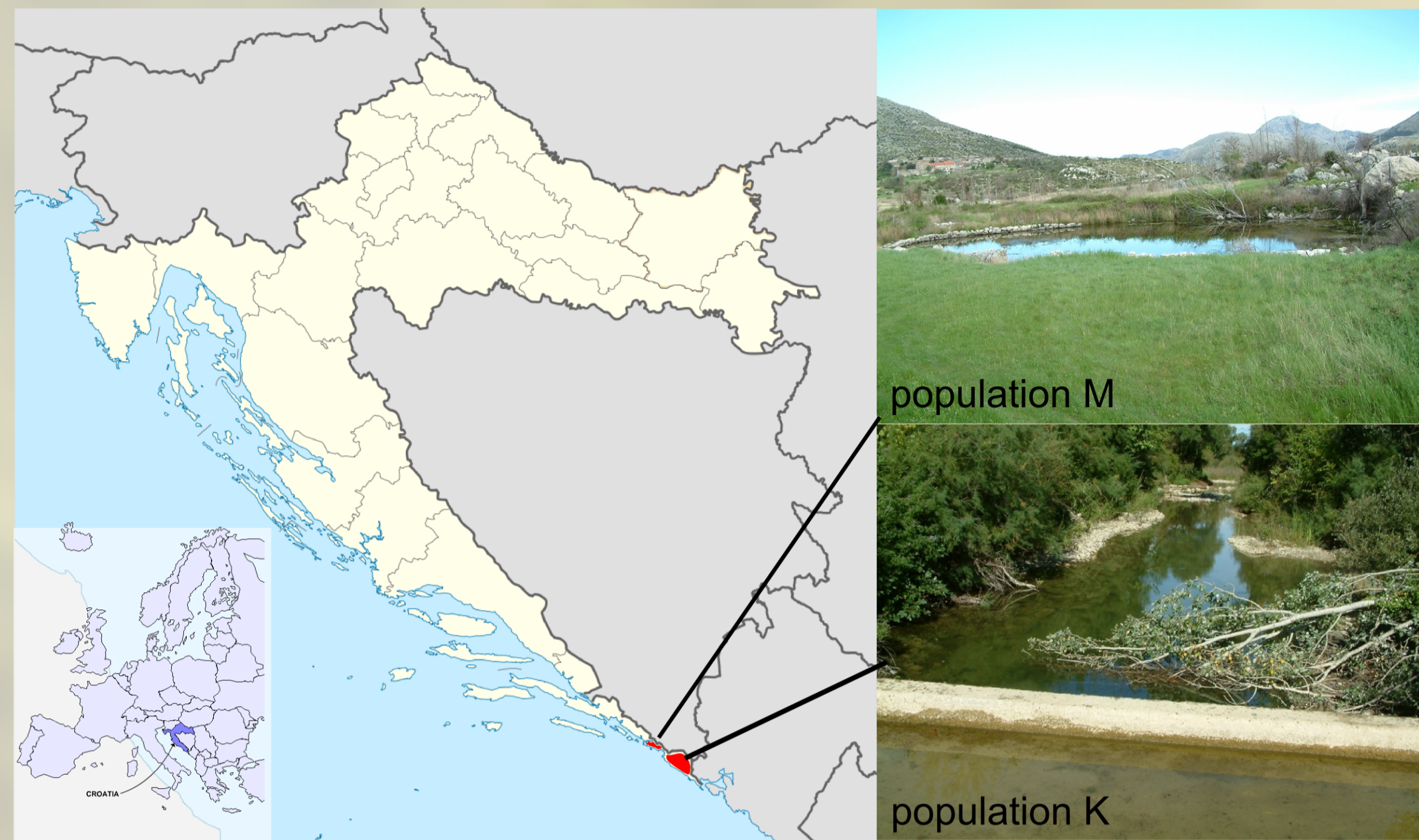


COMPARISON OF MORPHOMETRY AND ALGAL GROWTH OF CARAPACES OF TWO *Mauremys rivulata* POPULATIONS FROM DIFFERENT TYPES OF HABITAT



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AIMS:

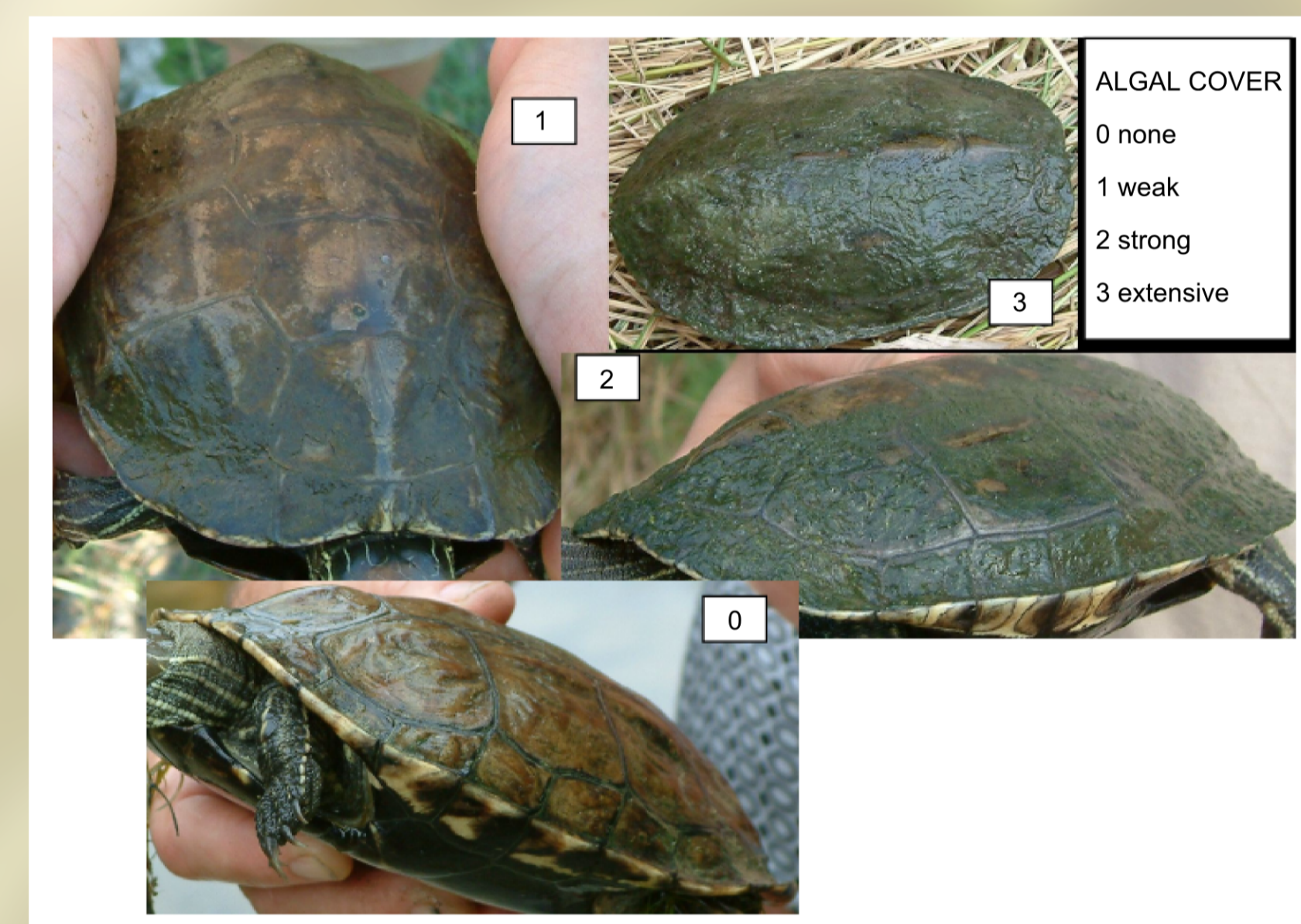
- To compare morphology and demography of the Majkovi and the Konavle population
- To assess potential danger for *Mauremys rivulata* * due to isolation, small habitat area and microhabitat diversity

*critically endangered in Croatia largely due to habitat loss

MEASURED:

- Plastron length (PL) *
- Carapace length (CL) *
- Carapace width (CW)
- Algal growth covering carapaces * *

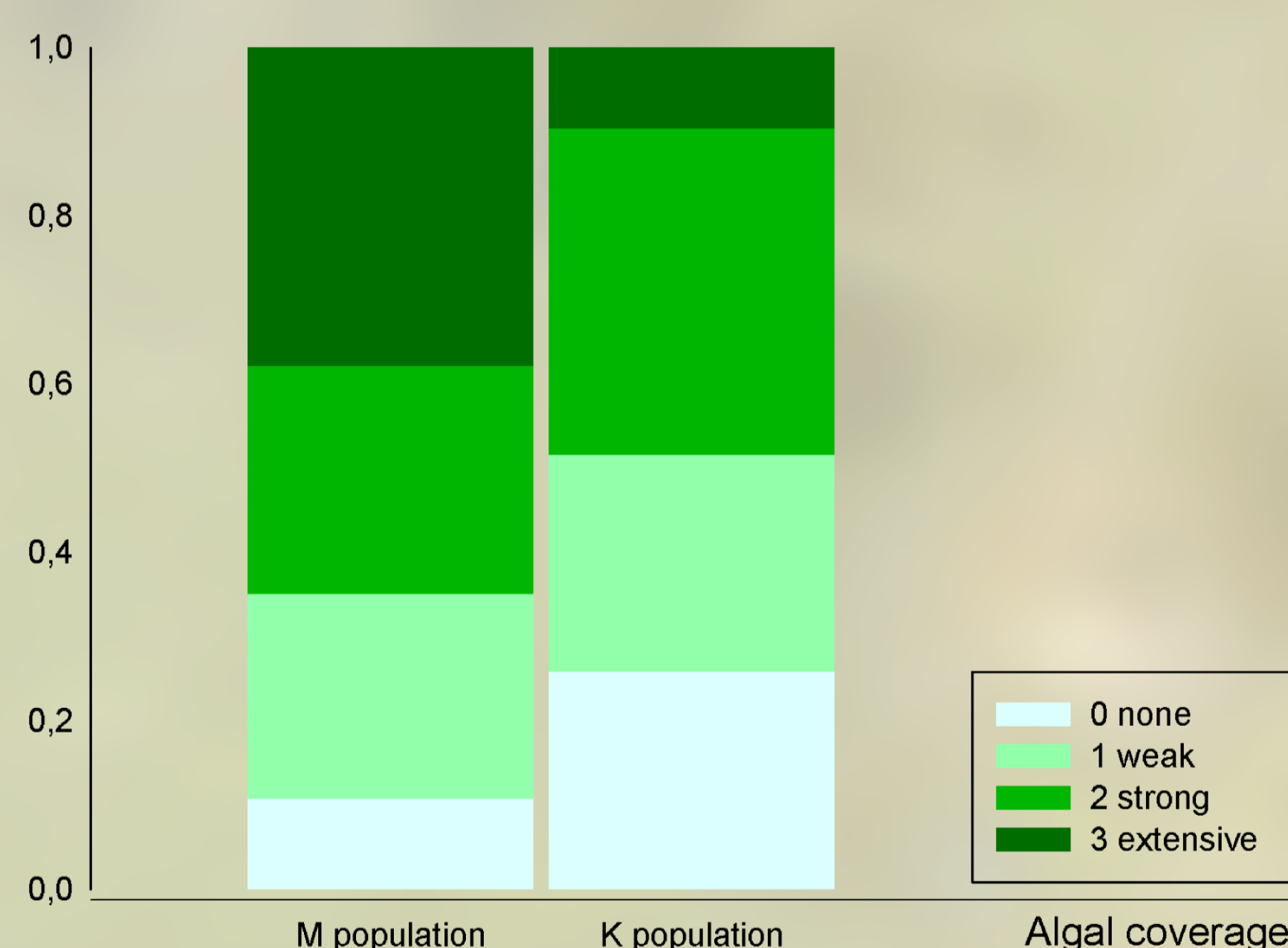
*measured using slide ruler
 **assessed visually using relative scale from 1 to 4



EFFECT OF POPULATION AND CLASS ON MORPHOMETRY CHARACTERISTICS IN *Mauremys rivulata* (n=86)

Measured morphometry characteristics	Population	Class			SEM1
		Male	Female	Juvenile	
Carapace length, cm	K	11.16 _a	14.34 _a	6.09 _b	0.41
	M	12.94 _a	14.08 _a	7.75 _b	
Plastron length cm	K	9.72 _a	13.18 _b	5.20 _c	0.35
	M	11.13 _a	13.73 _b	6.97 _c	
Carapace width, cm	K	7.18 _a	10.03 _a	4.62 _b	0.27
	M	8.78 _a	10.26 _a	5.52 _b	

ALGAL OVERGROWTH IN M AND K POPULATIONS



RATIO OF CLASSES IN M AND K POPULATIONS

	Male	Female	Juvenile
Population M	0.80	0.95	1
Population K	1.27	0.55	1

ANALYSIS

- SAS 9.1 software; MIXED procedure;
- model: $y_{ijk} = \mu + C_i + P_j + C_i * P_j + e_{ijk}$; fixed effects C (class) and P (population)

Algae coverage was lower in population K which could be influenced by the difference in habitat type (more places for sunbathing, water is oligotrophic)

Females were averagely larger than males in both populations.

There were no significant differences in measurements males and females between M and K populations.

