

CONNECTIVITY AND NURSERY VALUE FOR *Mugil curema* (PERCIFORMES, MUGILIDAE) IN FOUR ESTUARINE SYSTEMS WITH DIFFERENT DEGREES OF ANTHROPIZATION IN NORTHEAST BRAZIL, BASED ON ELEMENTAL CHEMICAL SIGNATURES OF OTOLITHS

DieleLima^{1 4}, Ana Mendez², Jorge Pisonero², André Pessanha¹, Alberto Correia^{3 4}

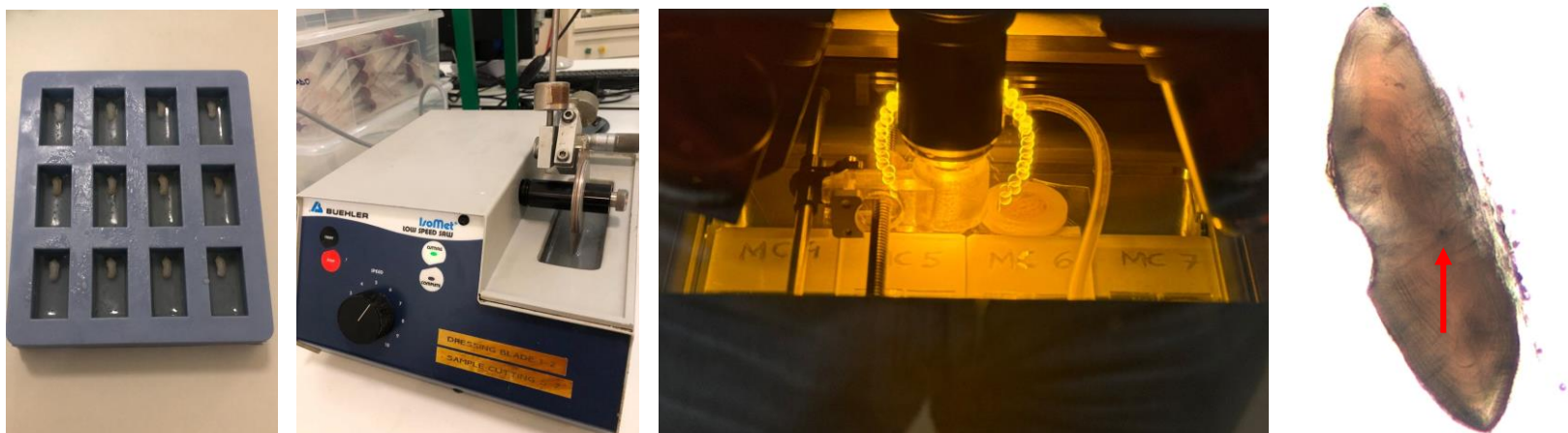
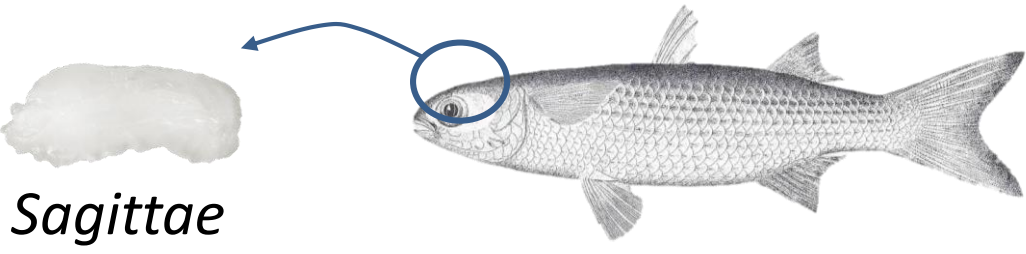
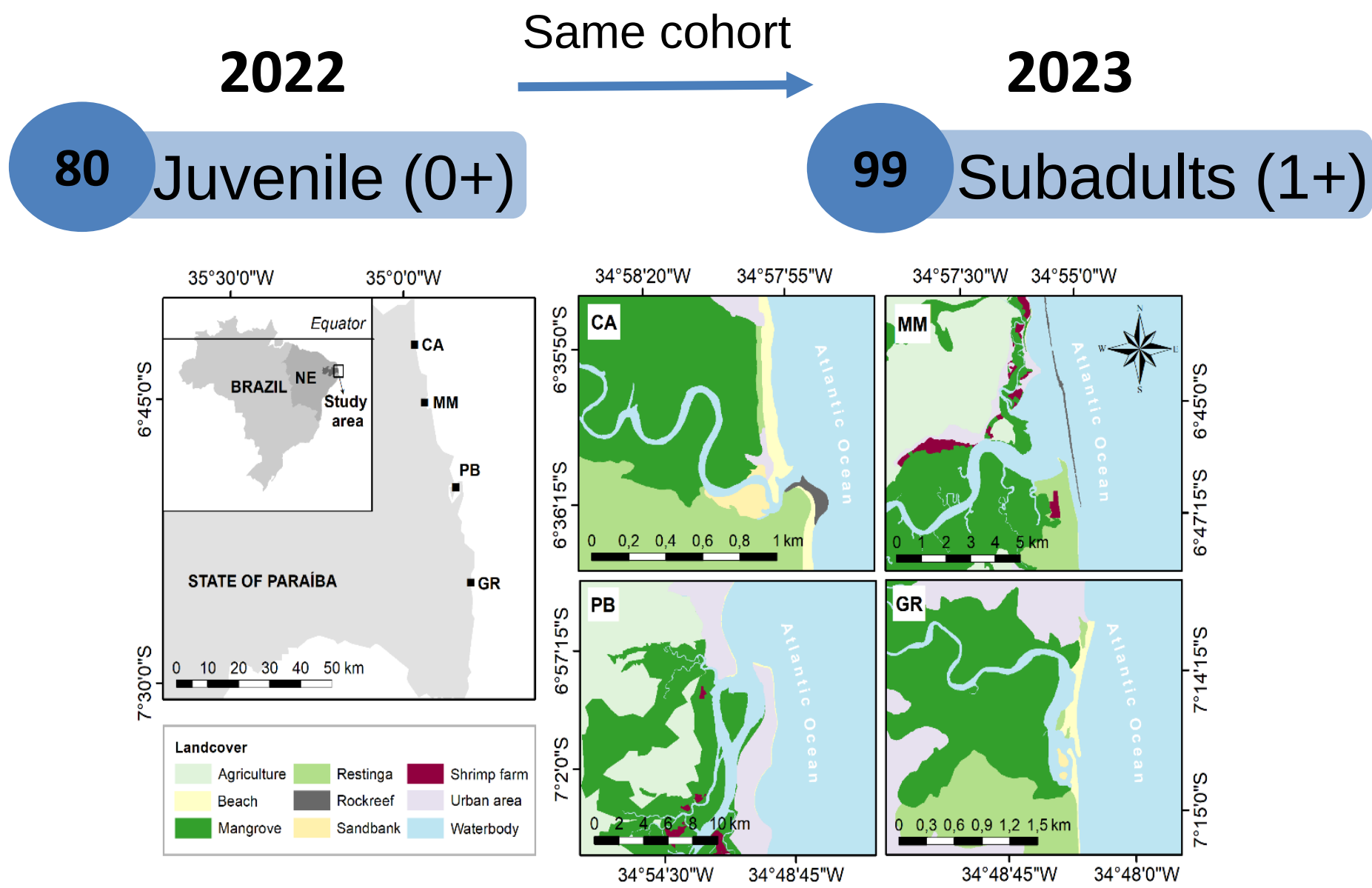
1. State University of Paraíba, Campina Grande, Brazil; 2. University of Oviedo, Mieres, Spain; 3. Abel Salazar Institute of Biomedical Sciences (ICBAS), University of Porto, Porto, Portugal; 4. Interdisciplinary Centre for Marine and Environmental Research (CIIMAR), Matosinhos, Portugal

INTRODUCTION & AIM



Assess the contribution of juvenile *Mugil curema* to adult coastal populations in four estuarine systems in the state of Paraíba, northeastern Brazil, considering differences in landscape structure and varying degrees of exposure to anthropogenic activities.

METHOD



Ca, Li, Mg, Mn, Ni, Zn, Sr, Ba, Pb

Statistical Analysis

ANOVA

LDFA

Cross-validation
analysis Jackknife

MANOVA

MLR

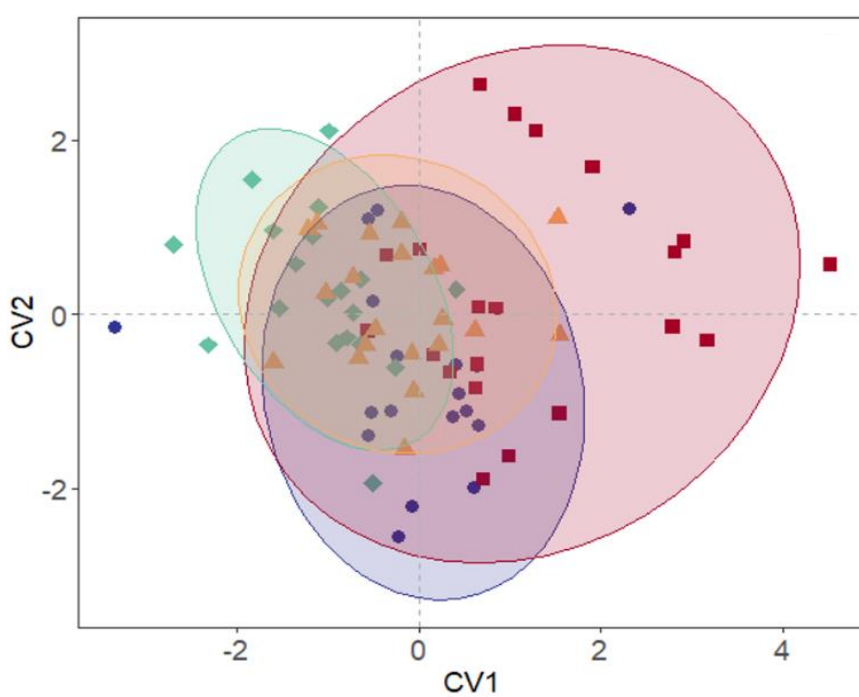
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RESULTS & DISCUSSION

Juvenile (0+)

Significant differences ($p < 0.05$),
Li and Ba

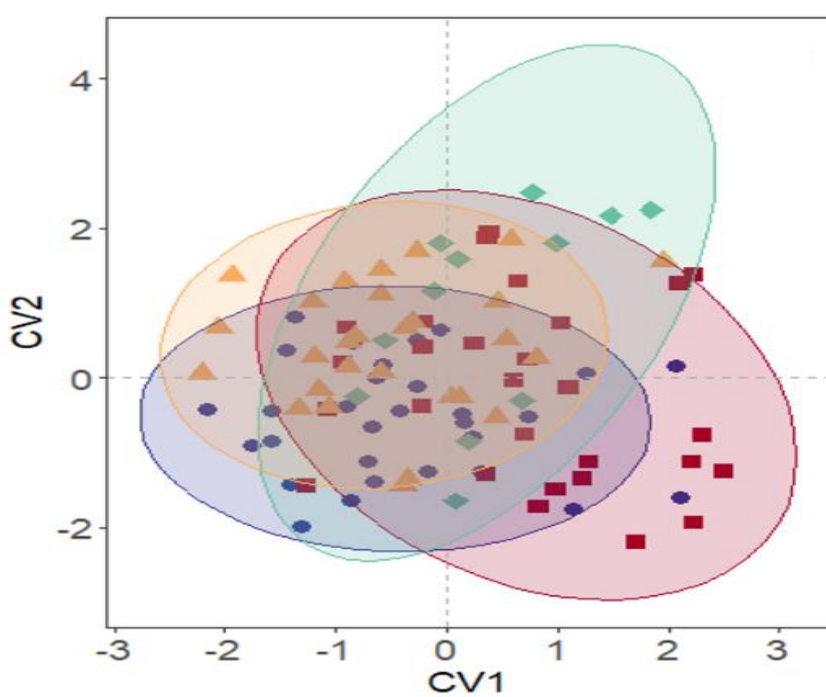
Pillai's Trace, $F_{3,76} = 2.4966$; $p < 0.05$



Subadults (1+)

Significant differences ($P < 0.05$), Li

Pillai's Trace, $F_{3,95} = 2.6074$; $p < 0.05$



	Predicted location				
	CA	GR	MA	PB	%Correct
Juvenile					
CA	10	2	3	3	55
GR	6	10	3	2	47
MA	2	0	13	5	65
PB	2	3	6	10	47
Total	20	15	25	20	53

	Predicted location				
	CA	GR	MA	PB	%Correct
Subadults					
CA	15	7	1	7	50
GR	7	14	4	4	48
MA	3	2	4	3	33
PB	6	6	2	14	50
Total	31	29	11	28	47

MLR

	Juvenile			
	CA	GR	MA	PB
Subadults				
CA	9,5	11,9	19,1	59,6
GR	16,3	37,0	17,5	29,2
MA	18,2	24,6	38,9	18,3
PB	18,1	13,7	9,8	58,4
Coastal zone	14,9	21,1	18,7	45,3

PB estuary is the main recruitment region, as it supplies many subadults to other areas and still maintains a high self-recruitment rate.

The Paraíba River estuary is a critical nursery for *Mugil curema*.

CONCLUSION

- The estuaries, even impacted ones, contribute to marine-coastal connectivity;
- Importance from a conservation perspective for the maintenance of processes and management of fishery resources.

FUTURE WORK / REFERENCES

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