

Table S1. Stable carbon and nitrogen isotope signatures of phytoplankton from various mangrove locations. The global average (standard deviation) used in the mixing model as marine phytoplankton is shown.

Location	$\delta^{13}\text{C}$	$\delta^{15}\text{N}$	Reference
Buzzards Bay United States (Atlantic Ocean)	21.3 ± 1.1	8.6 ± 1.0	Peterson et al. (1985)
The Guayas River Estuary, Ecuador (Pacific Ocean)	21.6	6.1	Cifuentes et al. (1996)
Lake of Sabaudia, Italy (Mediterranean Sea)	20.0 ± 2.1	6.0 ± 2.1	Vizzini & Mazzola (2003)
Tramandaí–Armazém estuary, Brasil (Atlantic Ocean)	16.6	6.8	Garcia et al. (2018)
Gulf of California, México (Pacific Ocean)	20.1 ± 1.9	8.1 ± 1.2	Muro-Torres et al. (2019)
Yellow River Estuary, China (Pacific Ocean)	20.1	6.0	Qu et al. (2019)
Average	20.1 ± 2.0	7.1 ± 1.7	

Table S2. Basal sources included in MixSIAR models for trophic categories and criteria for excluding sources.

Trophic categories / Taxon	Basal sources included	Criteria for excluding sources	Reference(s)
Mesozooplankton	Marine phytoplankton, Estuarine phytoplankton and Mangrove	Benthic algae, macrophyte and macroalgae were excluded because ARD is not a well-mixed estuary and the narrow feeding behavior of these species make these sources irrelevant.	LOPEGU (2017), Montoya et al. (2017)
Omnivores and carnivores epibenthos	Mangrove, Benthic algae, Macrophyte, Macroalgae	Marine and estuarine phytoplankton were excluded from the models based on the knowledge of availability for these consumers and feeding habits of some crab's species.	Werry & Lee (2005), Harada & Lee (2016)
Planktivores fish	Marine phytoplankton, estuarine phytoplankton and mangrove	Benthic algae, macrophyte and macroalgae were excluded from the models since ARD is not a well-mixed estuary and the narrow feeding behavior of these species.	LOPEGU (2017), Montoya et al. (2017)
Phytobenthivorous fish	Mangrove, Benthic algae, Macrophyte, Macroalgae	Marine and estuarine phytoplankton were excluded from the models based on the knowledge of availability for these consumers and feeding habits of <i>Mugil incilis</i> .	Sandoval (2012), LOPEGU (2017), Montoya et al. (2017)
Omnibenthivores, zoobenthivores and piscivores fish	Estuarine phytoplankton, Mangrove, Benthic algae, Macrophyte, Macroalgae	Marine phytoplankton source was excluded because it was irrelevant for mesozooplankton and planktivores fish, at the bottom of their trophic chains.	This study

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