**Biology and ecology of the lionfish *Pterois volitans / Pterois miles* as invasive alien species: a review**

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Table S1. Most relevant lionfish studies along the invasive and natural distribution ranges, which were used along this review.

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| --- | --- | --- | --- |
| **Topic** | **Country/Region** | **Locality** | **Reference** |
| **Diet** |   |   |   |
|   | Bahamas |   | Morris and Akins (2009) |
|   | United States | North Carolina | Muñoz *et al*. (2011) |
|   | Bonaire |   | McCleery (2011) |
|   | Mexico | Cozumel, Xcalak, Mahahual, Banco Chinchorro, Puerto Morelos, Playa del Carmen, Isla Mujeres | Valdez-Moreno *et al*. (2012) |
|   | Gulf of Mexico |  | Dahl and Patterson III (2014) |
|   | Mexico | Quintana Roo | Villaseñor-Derbez and Herrera-Pérez (2014) |
|  | Cuba | Holguín | Vega *et al*. (2015) |
|  | Cuba | Guanahacabibes National Park | Cobián-Rojas *et al*. (2016) |
|  | Mexico | Mexican Caribbean | Arredondo-Chávez *et al*. (2016) |
|   | Cuba | Guanahacabibes, La Habana, Cayo Las Brujas | Pantoja *et al*. (2017) |
|  | Northern Gulf of Mexico |  | Dahl *et al.* (2017) |
|   | Bermuda  |  | Peake *et al.* (2018)  |
|  | United States | Biscayne National Park | Sancho *et al*. (2018) |
|  | Bermuda |  | Eddy (2019) |
|  | Bermuda |  | Eddy *et al.* (2020) |
|  | Curaçao |  | Ritger *et al.* (2020) |
|  | Mexico  | Veracruz | Aguilar-Medrano and Vega-Cendejas (2020) |
|  | Mexico | Cozumel | Bogdanoff *et al*. (2020a) |
|  | United States | Western Florida | Santamaria *et al*. (2020) |
|  **Behavior** |   |   |   |
|   | Israel | Eilat | Fishelson (1997) |
|   | Bahamas | New Providence | Coté and Maljkovic (2010) |
|   | Bahamas | Eleuthera | Green *et al*. (2011) |
|   | Philippines,Guam and Cayman Islands |   | Cure *et al*. (2012) |
|   | Bahamas | Lee Stocking Island | Albins and Lyons (2012) |
|  | Bahamas | Rock Sound, west of Cape Eleuthera | Tamburello and Cote (2014) |
|  | Mexico | Mahahual, Banco Chinchorro Biosphere Reserve, Xcalak Reef National Park | García-Rivas *et al.* (2017) |
|  | Curaçao |  | Ritger *et al.* (2020) |
|  | United States |  | Bogdanoff *et al.* (2020b) |
|  | United States | Florida | Dahl and Patterson III (2020) |
| **Invasion** |   |   |   |
|   | United States, Bermuda | United States: North Carolina, New York, Georgia, Florida | Whitfield *et al*. (2002) |
|   | Dominican Republic | Morro (La Piedra de Kikim) | Guerrero and Franco (2008) |
|   | Cuba |   | Chevalier *et al*. (2008) |
|   | United States, Turks and Caicos Islands, Bahamas, Bermuda, Cayman Islands, Cuba, Jamaica, Dominican Republic, Puerto Rico, Mexico, Honduras, Costa Rica |   | Schofield (2009) \* |
|   | United States, Bermuda, Bahamas, Islas Turks and Caicos, Cayman Islands, Cuba, Jamaica, Dominican Republic, Puerto Rico, Mexico, Haiti, Nicaragua, Colombia, Honduras, Costa Rica, Panamá, Venezuela, Leeward Islands |   | Schofield (2010) \* |
|   | Bermuda, Cayman Islands, Colombia  | Cayman Islands: Grand Cayman, Colombia: San Andrés Archipelago, Santa Marta | Betancur-R. *et al*. (2011) |
|  | United States | Florida Key | Ruttenberg *et al*. (2012) |
|   | Brazil | Arraial do Cabo | Ferreira *et al*. (2015) |
|  | United States | Coastal waters of the Gulf of Mexico and Atlantic Ocean | Lyons *et al*. (2020) |
| **Abundance** |   |   |   |
|  | Taiwan |  | Chen *et al.* (2004) |
|  | Australia | Middleton and Elizabeth Reef | Oxley *et al.* (2004) |
|   | Western north Atlantic |   | Whitfield *et al*. (2006) |
|   | Bahamas  | New Providence | Green and Coté (2009) |
|   | Kenya, Bahamas | Bahamas: New Providence | Darling *et al*. (2011) |
|  | Costa Rica |  | Sandel (2011) |
|   | Indo-Pacific |   | Kulbicki *et al*. (2012) \* |
|  | Bahamas | New Providence | Green *et al*. (2012) |
|  | United States | Florida Key | Ruttenberg *et al*. (2012) |
|  | Cuba, Bahamas, Mesoamerican Barrier Reef in Belize and Mexico | Cuba: Jardines de Reina | Hackerott *et al*. (2013) |
|  | Curaçao, Bonaire |  | de León *et al*. (2013) |
|   | Gulf of Mexico | North of the Gulf of Mexico | Dahl and Patterson III (2014) |
|  | Bahamas | Island of San Salvador | Anton *et al*. (2014) |
|  | Venezuela | Morrocoy national park, Ocumare de la Costa, Chichiriviche de la Costa, Chuspa, Mochima National Park | Agudo and Klein (2014) |
|  | Cuba | Guanahacabibes National Park | Cobián-Rojas *et al.* (2016) |
|  | Cuba |  | Chevalier (2017) |
|  | Belize | Bacalar Chico Marine Reserve | Anderson *et al*. (2017) |
|  | Cuba | San Felipe National Park | Guardia *et al.*, 2017 |
|  | Bermuda |  | Goodbody-Gringley *et al*. (2019) |
|  | Gulf of Mexico |  | Dahl *et al.* (2019) |
|  | Mexico | Veracruz | Aguilar-Medrano and Vega-Cendejas (2020) |
| **Impact** |   |   |   |
|   | Bahamas | Lee Stocking Island | Albins and Hixon (2008) |
|  | Bahamas | New Providence | Green *et al.* (2012) |
|  | Bahamas | Lee Stocking Island | Albins (2013) |
|  | Bahamas | Lee Stocking Island | Albins (2015) |
|  | Venezuela | Archipelago Los Roques National Park | Elise *et al.* (2015) |
|  | Southeastern United States, Caribbean, Gulf of Mexico |  | Ballew *et al.* (2016) |
|  | Bahamas | Eleuthera | Eaton *et al.*, 2016 |
|  | Bahamas | Rock Sound | Tuttle (2017) |
|  | Bahamas | Stocking Island | Kindinger and Albins (2017) |
|   | Cuba | Guanahacabibes, La Habana, Cayo Las Brujas | Pantoja *et al*. (2017) |
|  | Bahamas | Great Bahama Bank | Kindinger and Albins (2017) |
|  | United States | Biscayne National Park | Curtis *et al.* (2017) |
|   | Colombia | Santa Marta, Capurgana, Isla de San Andrés, Cabo de la Vela | Rojas-Vélez *et al.* (2019) |
|   | Cuba, Mexico | Cuba: Guanahacabibes, Mexico: Arrecifes de Xcalak | Cobián-Rojas *et al.* (2018a) |
|  | Northern Gulf of Mexico |  | Chagaris *et al*. (2020) |
|  | Honduras | La Ensenada, Tela Bay | Hunt *et al*. (2020) |
|  | Mexico | Xcalak | Murillo-Pérez *et al*. (2021) |
| **Control** |   |   |   |
|   | Bahamas | New Providence, Eleuthera | Maljkovic and Van Leeuwen (2008) |
|  | Curaçao, Bonaire |  | de León *et al*. (2013) |
|  | Cuba, Bahamas, Mesoamerican Barrier Reef in Belize and Mexico | Cuba: Jardines de Reina | Hackerott *et al*. (2013) |
|  | Belize | Bacalar Chico Marine Reserve (BCMR) | Anderson *et al*. (2017) |
|  | Gulf of Mexico |  | Harris *et al*. (2019) |
|  | Bahamas | Eleuthera | Tamburello *et al.* (2019) |
|  | Mexico | Cozumel Island | Chel-Guerrero *et al*. (2020) |
|  | Belize; Cayman Islands | Cayman Islands : Little Cayman Island | Bogdanoff *et al.* (2020c) |
|  | United States; Bahamas | United States : North Carolina | Bogdanoff *et al*. (2020d) |
|  | United States: Virgin Islands |  | Simnitt *et al.,* 2020 |
|  |  |  |  |
| **Genetic/Phylogenetic** |   |   |   |
|   | Jordania, Kenya, Sri Lanka, Indonesia, Taiwan |   | Kochzius *et al*. (2003) |
|   | Indo-PacificUnited States | United States: North Carolina, New York, Florida | Hamner *et al*. (2007) |
|  | Cuba | Guanahacabibes | Labastida *et al.* (2015) |
|   | Mexico | Chinchorro Bank | Guzmán-Méndez *et al*. (2017) |
|   | Turkey, Cyprus, Israel, Jordania, South Africa Madagascar, India, Sri Lanka, Indonesia, Japan |   | Stern *et al*. (2018) |
|  | Mexico, Cuba, Belize, Puerto Rico | Mexico; Banco Chinchorro Biosphere Reserve, Puerto Morelos Reef National Park, Xcalak National Reef Park, Veracruz Coral Reef System National Park; Cuba: Guanahacabibes Biosphere Reserve; Belize: Turneffe Atoll Marine Reserve; Puerto Rico: La Parguera | Labastida-Estrada *et al.*, 2019 |
|   | Bahamas, Mexico, Belize, Honduras, Panamá, Filipinas, Taiwan, Sri Lanka |   | Burford *et al*. (2019) |
| **Toxicology** |   |   |   |
|  | Islas Marshall |  | Saunders and Taylor (1959) |
|   | United States | San Francisco | Cohen and Olek (1989) |
|  | Cuba |  | Squadrone *et al*. (2019) |
|  | United States | Florida | van den Hurk *et al*. (2020) |
| **Reproduction/Development** |  |  |  |
| **Reproduction** |   |   |   |
|   | United States, Bahamas | United States: North Carolina | Morris *et al*. (2011a) |
|   | Cayman Islands | Little Cayman Island | Gardner *et al*. (2015) |
|  | Cuba | Havana | Cruz-López *et al.* (2020) |
| **Larval duration** |   |   |   |
|   | Bahamas |   | Ahrenholz and Morris (2010) |
| **Crecimiento** |  |  |  |
|  | Colombian Caribbean |  | Bustos-Montes *et al*. (2020) |

\*Artículos no incluidos en el mapa

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