**Figure 1.** Prediction curves and percentage contribution of the best set of predictive variables in SDM. In figures a-d the black lines represent the ten optimization procedures and the red line the average model. **(a)** Aridity Index; **(b)** Mean Temperature of Coldest Quarter; **(c)** Annual Precipitation; **(d)** Precipitation Seasonality; **(e)** Percentage contribution of each variable.



**Figure 2.** Species Distribution Modeling (SDM) of *Anamaria heterophylla* for the Caatinga. **(a)** The boundaries of the Brazilian Federative Units. Al - Alagoas; BA - Bahia; CE - Ceará; DF - Distrito Federal; GO - Goiás; MA - Maranhão; MG - Minas Gerais; PB - Paraíba; PE - Pernambuco; PI - Piauí; RN - Rio Grande do Norte; SE - Sergipe; TO - Tocantins. **(b)** Protected Areas (PAs) and Priority areas for the conservation of the Caatinga (PACCs) indicated by SDM with high environmental suitability (≥0.8) in the Caatinga. 1 - PA Pond of Sobradinho (BA); 2 - PACC Juazeiro Sul (BA); 3 - PACC Petrolina (PE/BA); 4 - PA Riacho Pontal (PE); 5 - PA Serra of Areal (PE); 6 - PA Tatu-Bola (PE); 7 - PACC Parambú/Cococi (CE); 8 - PA Aiuaba; 9 - PACC Serra de Santa Luzia (PB/RN).

