

S1 Table. Characteristics of sampling locations in Liberia, Senegal, Gabon North and Gabon South.

| Site              | Site number | Mangrove forest type | Dominant species   | Latitude     | Longitude    | pH  | Salinity (ppt) | Soil Depth (cm) |
|-------------------|-------------|----------------------|--------------------|--------------|--------------|-----|----------------|-----------------|
| <b>Liberia</b>    |             |                      |                    |              |              |     |                |                 |
| <b>NCM1</b>       | L1          | Medium               | <i>R. racemosa</i> | N 5°47.583'  | W 9°58.216'  | 6.7 | 18.7           | ≥300            |
| <b>NCT2</b>       | L2          | Tall                 | <i>R. racemosa</i> | N 5°48.236'  | W 9°57.086'  | 6.9 | 5.2            | ≥300            |
| <b>NCT3</b>       | L3          | Tall                 | <i>R. racemosa</i> | N 5°48.277'  | W 9°57.274'  | 6.4 | 5.7            | ≥300            |
| <b>NCM4</b>       | L4          | Medium               | <i>R. racemosa</i> | N 5°48.069'  | W 9°57.361'  | 6.6 | 8.2            | ≥300            |
| <b>NCM5</b>       | L5          | Medium               | <i>R. racemosa</i> | N 5°47.955'  | W 9°58.242'  | 6.2 | 21.2           | 90              |
| <b>NCT6</b>       | L6          | Tall                 | <i>R. racemosa</i> | N 5°47.571'  | W 9°58.277'  | 7.3 | 17.8           | ≥300            |
| <b>MRT7</b>       | L7          | Tall                 | <i>R. racemosa</i> | N 5°56.321'  | W 10°05.089' | 6.4 | 11.2           | ≥300            |
| <b>MRM8</b>       | L8          | Medium               | <i>R. racemosa</i> | N 5°55.747'  | W 10°04.576' | 6.9 | 13.5           | ≥300            |
| <b>MRT9</b>       | L9          | Tall                 | <i>R. racemosa</i> | N 5°55.853'  | W 10°04.417' | nd* | 35.0           | ≥300            |
| <b>BRM10</b>      | L10         | Medium               | <i>R. racemosa</i> | N 5°54.992'  | W 10°03.866' | 6.8 | 23.8           | 220             |
| <b>Senegal</b>    |             |                      |                    |              |              |     |                |                 |
| <b>Baouth</b>     | S2          | Low                  | <i>R. mangle</i>   | N 13°57.725' | W 16°38.736' | 6.8 | 46.3           | ≥300            |
| <b>Diamniadio</b> | S3          | Medium               | <i>R. mangle</i>   | N 14°03.157' | W 16°32.626' | 6.3 | 57.3           | ≥300            |
| <b>Djirnda</b>    | S5          | Medium               | <i>R. racemosa</i> | N 14°04.536' | W 16°34.014' | 6.4 | 51.5           | ≥300            |
| <b>Fambine</b>    | S4          | Medium               | <i>R. racemosa</i> | N 13°58.567' | W 16°36.945' | 6.4 | 49.2           | ≥300            |
| <b>Mounde</b>     | S1          | Low                  | <i>R. racemosa</i> | N 14°00.062' | W 16°34.230' | 6.4 | 86.0           | 172             |
| <b>Sang</b>       | S6          | Low                  | <i>A. nitida</i>   | N 14°01.957' | W 16°34.713' | 6.6 | 95.5           | ≥300            |

S1 Table (Continued)

| Site               | Site Number | Mangrove forest type | Dominant species                          | Latitude     | Longitude   | pH  | Salinity (ppt) | Soil depth (cm) |
|--------------------|-------------|----------------------|---|--------------|-------------|-----|----------------|-----------------|
| <b>Gabon South</b> |             |                      |   |              |             |     |                |                 |
| Jardin du Elephant | G1          | Medium               | <i>R. racemosa</i>                        | S2°42.360'   | E 9°54.438' | 6.3 | 29.8           | 222             |
| Case Shell         | G2          | Medium               | <i>R. racemosa</i>                        | S2°29.455'   | E 9°43.826' | 6.7 | 19.8           | 182             |
| Mwana Mouele       | G3          | Tall                 | <i>A. germinans</i>                       | S2°23.593'   | E 9°38.960' | 6.7 | 42.0           | ≥300            |
| Mwana Mouele S     | G4          | Tall                 | <i>A. germinans</i>                       | S2°24.505'   | E 9°38.861' | nd  | nd             | 183             |
| Lac Simba Deux     | G5          | Tall                 | <i>R. racemosa</i>                        | S2°27.742'   | E 9°44.485' | 6.2 | 4.7            | ≥300            |
| Lac Simba          | G6          | Tall                 | <i>R. racemosa</i>                        | S 2°27.018'  | E 9°44.757' | 5.9 | 18.7           | ≥300            |
| Lac Sounga Deux    | G7          | Tall                 | <i>R. racemosa</i>                        | S 2°26.927'  | E 9°43.907' | 6.8 | 22.2           | ≥300            |
| Lac Sounga         | G8          | Tall                 | <i>R. racemosa</i>                        | S 2°25.997'  | E 9°43.729' | 6.2 | 20.8           | ≥300            |
| Paga               | G9          | Tall                 | <i>R. racemosa</i>                        | S 2°30.210'  | E 9°47.706' | 6.7 | 20.0           | ≥300            |
| Ndougou            | G10         | Tall                 | <i>R. racemosa</i><br><i>A. germinans</i> | S 2°25.019'  | E 9°38.923' | 6.7 | 33.7           | ≥300            |
| <b>Gabon North</b> |             |                      |   |              |             |     |                |                 |
| Nzeme              | G11         | Tall                 | <i>R. racemosa</i>                        | N 00°30.261' | E 9°36.971' | 7.3 | 31.8           | ≥300            |
| Mud bank           | G12         | Medium               | <i>R. racemosa</i>                        | N 00°34.422' | E 9°33.822' | 7.4 | 31.2           | ≥300            |
| Moka               | G13         | Tall                 | <i>R. racemosa</i>                        | N 00°36.209' | E 9°28.340' | 6.9 | 39.7           | ≥300            |
| Moka River II      | G14         | Tall                 | <i>R. racemosa</i>                        | N 00°37.049' | E 9°28.714' | 7.4 | 29.0           | ≥300            |
| Bambouchine        | G15         | Tall                 | <i>R. racemosa</i>                        | N 00°27.836' | E 9°36.015' | 7.1 | 31.8           | ≥300            |
| Massotie           | G16         | Tall                 | <i>R. racemosa</i>                        | N 00°41.708' | E 9°37.297' | 6.9 | 16.8           | ≥300            |
| Nzeme River II     | G17         | Tall                 | <i>R. racemosa</i>                        | N 00°28.458' | E 9°39.281' | 6.9 | 27.5           | ≥300            |

\*nd= no data due to equipment failures or other unforeseen difficulties in the field.