|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Support Material** | **Pyrolysis T (ºC)** | **Amine** | **Adsorption Capacity****(mmol/g)** | **References** |
| Sawdust biochar | 850 | MEA | 1.02 | ([Madzaki and KarimGhani, 2016](#_ENREF_6)) |
| Hickory wood Biochar | 600 | - | 1.67 | ([Creamer et al., 2014](#_ENREF_4))  |
| Hickory Chips Biochar | 600 | NH4OH | 1.20 | ([Xu et al., 2019](#_ENREF_8)) |
| Bagasse Biochar | 600 | NH4OH | 1.09 | ([Xu et al., 2019](#_ENREF_8)) |
| Sawdust Biochar | 500 | N2 | 3.70 | ([Bamdad et al., 2018](#_ENREF_1)) |
| Almond Shells Biochar | 650 | O2 | 2.02 | ([Plaza et al., 2014](#_ENREF_7)) |
| Olive Stones Biochar | 650 | O2 | 2.09 | ([Plaza et al., 2014](#_ENREF_7)) |
| Rice Straw Biochar | 600 | - | 1.02 | ([Huang et al., 2015](#_ENREF_5)) |
| Cotton Stalk Biochar | 600 | CO2-NH3 | 0.91 | ([Zhang et al., 2014](#_ENREF_9)) |
| Cotton Stalk Biochar | 700 | CO2-NH3  | 0.88 | ([Zhang et al., 2014](#_ENREF_9)) |
| Pine wood Biochar | 550 | TEPA | 2.04 | ([Chatterjee et al., 2018](#_ENREF_3)) |
| Pine wood Biochar | 550 | TEPA-MEA | 1.91 | ([Chatterjee et al., 2019](#_ENREF_2)) |
| Miscanthus Biochar | 700 | TEPA | 2.89 | This Study |
| Switchgrass Biochar | 700 | TEPA | 2.54 | This Study |
| Cornstover Biochar | 700 | TEPA | 2.37 | This Study |
| Sugarcane Bagasse Biochar | 700 | TEPA | 2.22 | This Study |

**Table S3.** Comparison of Adsorption Capacities of Biochars Synthesized in the Present Study with the Literature

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