

Supplemental information

Straw Utilization in China – Status and Recommendations

Jiqin Ren, Peixian Yu, Xiaohong Xu

Table S1. N, P₂O₅, and K₂O contents (% of dry matter) in wheat straw, corn stalks, and soybean straw (data source [1]).

Type	N	P ₂ O ₅	K ₂ O
Wheat straw	0.729	0.310	1.49
Corn stalks	0.658	0.258	1.17
Soybean straw	0.695	0.217	1.06

Table S2. Emission factors (g/kg) of five types of straw (data source [2]).

Type of straw	PM _{2.5}	BC	OC	SO ₂	NO _x	CO	NM VOC	NH ₃	CH ₄	CO ₂
Rice	12.95	0.69	3.3	0.9	3.1	34.7	6.05	0.78	3.2	1,460
Wheat	7.6	0.49	2.7	0.85	3.3	60	7.5	0.37	3.4	1,460
Maize	11.7	0.35	3.9	0.44	4.3	53	10	0.68	4.5	1,350
Rapeseed	20.27	0.46	4.5	0.56	3.37	68.3	8.17	0.78	3.5	1,445
Beans	3.32	0.23	1.1	0.25	1.12	33.5	8.64	0.53	3.9	1,445

References

1. UWEX (University of Wisconsin-Extension), 2010. Crop residue value. <https://green.uwex.edu/files/2010/05/Crop-Residue-Value1.xlsx>. (accessed February 2019).
2. Peng, L.Q., Zhang, Q., He, K. B., 2016. Emission inventory of atmospheric pollutants from open burning of crop residue in China based on a national questionnaire. Res Environ Sci. 29(8), 1109–1118. (in Chinese with an abstract in English)