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*Supplement of*

## **Competition between plant functional types in the Canadian Terrestrial Ecosystem Model (CTEM) v. 2.0**

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Table S1: Classification scheme used to map the MODIS land cover classes based on the MOD12C1 product (Friedl et al., 2013) to the PFTs that are represented in CTEM. The logic follows the approach used by Wang et al. (2006) who reclassified GLC2000 land cover (Bartholom and Belward, 2005) and Ramankutty and Foley (1999) potential vegetation classes (hereafter R&F1999) to CTEM PFTs. MOD12C1 Classification

	CTEM PFTs							Corresponding	
	NDL-EVG	NDL-DCD	BDL-EVG	BDL-DCD	Crops	Grass	Bare	Treed	Wang et al. (2006) class
Woody savanna				0.55		0.35	0.10	0.55	
Urban built-up areas						0.10	0.80	0.10	
Savanna				0.35		0.40	0.25	0.35	R&F1999 class 9
Permanent wetlands	0.20		0.05	0.20		0.05	0.10	0.45	
Permanent snow and ice							1.00		
Open shrublands				0.25		0.35	0.40	0.25	R&F1999 class 12
Needleleaf evergreen	1.00							1.00	GLC2000 class 4
Needleleaf deciduous		0.80		0.50		0.10	0.10	0.80	GLC2000 class 5
Mixed forest	0.40					0.10	0.35	0.90	GLC2000 class 6
Grasslands						0.65			R&F1999 class 10
Croplands					0.50	0.40	0.10		GLC 2000 class 16
Cropland & natural vegetation mosaic					0.50	0.20	0.10	0.20	GLC2000 class 17
Closed shrublands			0.20	0.50		0.20		0.80	R&F1999 class 11 <sup>a</sup>
Broadleaf evergreen			0.30			0.20		1.00	GLC2000 class 1
Broadleaf deciduous			1.00					1.00	GLC2000 class 2
Bare ground				1.00			1.00		GLC2000 class 19

<sup>a</sup>R&F1999 classification is 'dense' shrubland.

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