

**Supplementary Material**

**Improved soil fertility, plant nutrition and grain yield of soybean and millet following maize intercropped with forage grasses and crotalaria in the Brazilian savanna**

*Lucélia de Cássia Rodrigues de Brito<sup>A,\*</sup>, Henrique Antunes de Souza<sup>B</sup>, Raimundo Bezerra de Araújo Neto<sup>B</sup>, Diógenes Manoel Pedroza de Azevedo<sup>B</sup>, Edvaldo Sagrilo<sup>B</sup>, Renato Falconeres Vogado<sup>C</sup>, Suzane Pereira Carvalho<sup>D</sup>, Ane Caroline de Melo Ferreira<sup>E</sup>, and Michel André Cavigelli<sup>F</sup>*

<sup>A</sup>Universidade Federal do Piauí, Teresina, PI, Brazil.

<sup>B</sup>Embrapa Meio-Norte, Teresina, PI, Brazil.

<sup>C</sup>Universidade Federal da Paraíba, Areia, PB, Brazil.

<sup>D</sup>Instituto Federal de Educação, Ciência e Tecnologia do Piauí, Teresina, PI, Brazil.

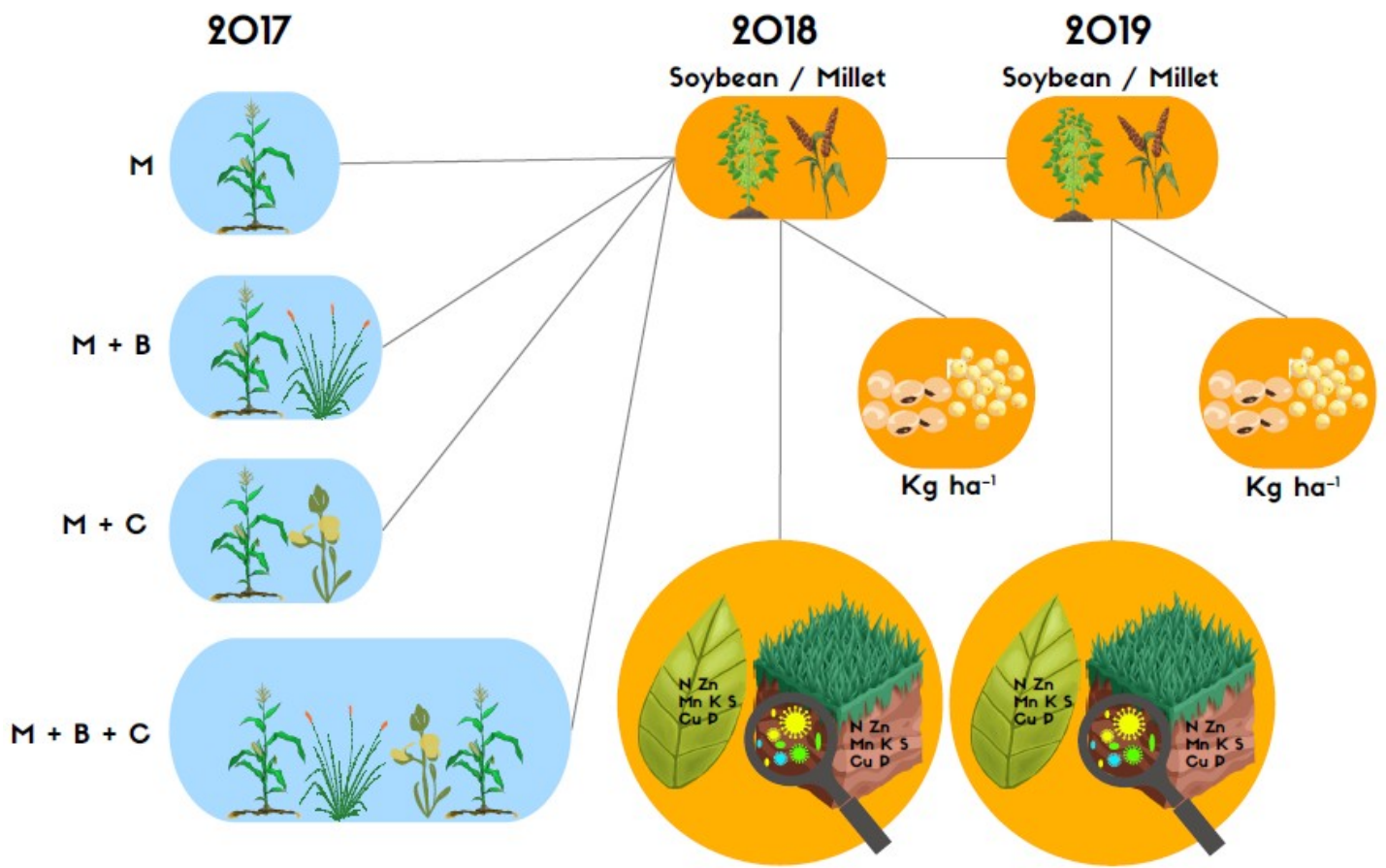
<sup>E</sup>Universidade Federal de Lavras, Lavras, MG, Brazil.

<sup>F</sup>USDA-ARS, Beltsville, MD, USA.

\*Correspondence to: Lucélia de Cássia Rodrigues de Brito Universidade Federal do Piauí, Teresina, PI, Brazil Email: [lucelia\\_cassia@yahoo.com.br](mailto:lucelia_cassia@yahoo.com.br)

**Supplementary Table S1.** Dates of main activities and management practices carried out in monoculture maize, maize in double or triple intercropping (brachiaria and crotalaria), soybean and millet. Brejo, Maranhão, Brazilian savannah region.

Date	Action
2017	
February 07, 2017	Sowing maize in monoculture and in double or triple intercropping with <i>Urochloa ruzizienses</i> (brachiaria) and <i>Crotalaria juncea</i>
February 22, 2017	1 <sup>st</sup> topdressing fertilization
March 03, 2017	2 <sup>nd</sup> topdressing fertilization
July 15, 2017	Harvest of maize
2018	
January 15, 2018	Sowing soybean
February 10, 2018	1 <sup>st</sup> topdressing fertilization
May 25, 2018	Harvesting of soybean
June 01, 2018	Sowing millet
October 15, 2018	Harvesting of millet
2019	
January 09, 2019	Sowing soybean
February 01, 2019	1 <sup>st</sup> topdressing fertilization
May 29, 2019	Harvesting of soybean
June 02, 2019	Sowing millet
October 12, 2019	Harvesting of millet



**Supplementary Figure S1.** Schematic representation of the treatments, cropping sequences and analyzes performed in the study.