

SUPPLEMENTARY MATERIAL 2

Table S1. Location, climate and vegetation description of the four systems studied.

Tabla S1. Ubicación, clima y descripción de la vegetación de los cuatro sistemas estudiados.

Ecosystem name	Phytogeographic province/units (Oyarzabal et al. 2018)	Location and approximate altitude (m a. s. l.)	Mean annual temperature and precipitation	Köppen climate classification (Beck et al. 2018)	Plant community description
Sub-Andean	Chaco Unit 7. Xerophytic forests (Chaco Serrano)	“Quebrada del Condorito” National Park Pampa de Achala 31° 30' S 64° 45' W 2000 m a. s. l.	8.1 °C 921 mm	Cwb Temperate-warm summer. Sub-Humid	<i>Polylepis australis</i> (“tabaquiullo”) woodlands (Community 7.3 in Oyarzabal et al. [2018]; Type 1.4 <i>Polylepis australis</i> - <i>Deyeuxia hieronymi</i> sub-Andean woodlands and shrublands, following Cabido et al. [2018]). <i>Polylepis</i> woodlands represent the less disturbed sites, and alternate with rocky outcrops and tall-tussock grasslands dominated by <i>Deyeuxia hieronymi</i> and <i>Poa stueckertii</i> (Cingolani et al. 2003, 2004, 2008), which are the result of fire and grazing
Mountain Chaco	Chaco Unit 7. Xerophytic forest (Chaco Serrano)	“Parque La Quebrada” Natural Reserve. Río Ceballos-Salsipuedes 31° 07' S 64° 20' W 1000 m a. s. l.	15.5 °C 847 mm	Cwa Temperate-hot summer Sub-Humid	<i>Lithraea molleoides</i> and <i>Zanthoxylum cocc</i> (Community 7.1 in Oyarzabal et al [2018]; Type 1.1 <i>Lithraea molleoides</i> - <i>Croton lachnostachyus</i> mountain Chaco forest, following Cabido et al. [2018]). After fire and grazing, the forest alternates with grasslands dominated by <i>Jarava pseudoichu</i> and <i>Festuca hieronymi</i> (Giorgis et al. 2013, 2017)
Espinal	Espinal Xerophytic forest (Caldenal)	“Ralicó” Natural Reserve Villa Huidobro 31° 23' S 63° 35' W 300 m a. s. l.	17.2 °C 621 mm	Cfa Subtropical- Hot summer Sub-Humid	<i>Prosopis caldenia</i> , <i>P. nigra</i> y <i>Celtis ehrenbergiana</i> forest with a shrub stratum including <i>Condalia microphylla</i> , <i>Gafoea decorticans</i> , <i>Lycium</i> spp. y <i>Nassella</i> spp. (Unit 22, Community 22.1 in Oyarzabal et al. [2018]; Type 1.3 Espinal Forest, after Cabido et al. [2018]; Zeballos et al. [2020]). After fire and grazing, the dominant community is a grassland dominated by <i>Nassella</i> spp., <i>Jarava</i> spp. y <i>Piptochaetium</i> spp
Arid Chaco	Chaco Xerophytic forest (Chaco Árido)	“Chancani” Natural Reserve Chancani 31° 23' S 65° 27' W 350 m a. s. l.	18 °C 538 mm	BSh Hot Steppe Dry	<i>Aspidosperma quebracho-blanco</i> (Unit 9, Community 9.1. in Oyarzabal et al [2018]; Type 2.2 <i>Aspidosperma quebracho-blanco</i> - <i>Senegalia praecox</i> - <i>Sarcophallus mistol</i> Subtropical Chaco Forest, after Cabido et al. [2018]) xerophytic mature forest. After logging, fire and/or grazing they resulted in open shrublands dominated by <i>Larrea divaricata</i> and grasses like <i>Pappophorum philippianum</i> and <i>Lepidolou</i> sp.

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