Supplementary material

Table S1. Articles with soil information for invasive versus native plants.

Reference	Journal	Site	Native species	Invasive species	Soil Variables
Aguilera et al. (2010)	Biol Invasions	Northampton, Massasuchetts (USA)	Native herbs	*Fallopia japonica*	Total [C], Total [N]
Allison et al., (2006)	Soil Biol Biochem	Hawaii (USA)	*Metrosideros polymorphica*	*Falcataria moluccana*	Total [N], Total [P]
Aragon et al. (2014a)	Plant and Soil	Tucuman (Argentina)	*Cinnamomum porphyrium*, *Cupania vernalis*, *Myrsine laetevirens*	*Ligustrum vulgare*, *Morus* sp.	Total [C], Total [N], Total [P] P-Olsen, $[NH_4^+]$, C/N
Ashton et al. (2005)	Ecological Applications	New York (USA)	*Acer rubrum*, *Vitis novae-angliae*, *Viburnum acerifolium*, *Cornus florida*	*Acer platanoides*, *Ampelopsis brevipedunculata*, *Lonicera morrowii*, *Rosa multiflora*	P-Olsen, $[NH_4^+]$, $[NO_3^-]$
Badano et al. (2006)	Oikos	(Chile)	Native vegetation	*Azorella monantha*	P-Olsen, $[NH_4^+]$, $[NO_3^-]$
Baer et al. (2006)	Agriculture Ecosystems Environment	Jackson County Illinois (USA)	Native grassland	*Eleagnus umbellata*	C/N, $[NO_3^-]$
Bajpai and Inderjit (2013)	AOB Plants	Palampur (India)	*Cannavis sativa*, *Oplismenus* sp.	*Ageratina adenophora*	$[NO_3^-]$
Belnap et al. (2005)	Ecology	Utah (USA)	*Hilaria jamesii*	*Bromus tectorum*	Total [N], P-Olsen, $[NH_4^+]$, $[NO_3^-]$
Belnap and Phillips (2001)	Ecological Applications	Canyolands National Park Utah (USA)	*Hilaria jamesii*	*Bromus tectorum*	P-Olsen, $[NH_4^+]$, $[NO_3^-]$
Blank (2008)	Inv Plant Sci Management	Lake Lahoton California (USA)	*Achnatherum hymenoides*, *Elymus elymoides*	*Bromus tectorum*	Total [C], Total [N], P-Olsen
Blank and Morgan (2014)	Inv Plant Sci Management	Honey Lake CA (USA)	*Elytrigia elongata*	*Lepidium latifolium*	P-Olsen
Booth et al. (2003)	Biogeochemistry	Curlew Valley Utah (USA)	*Elymus elymoides*, *Artemisia tridentata*	*Bromus tectorum*	Total [N], $[NH_4^+]$, $[NO_3^-]$
Boswell and Espie (1998)	New Zealand J Agricultural Res	Tara Hills New Zealand	*Festuca novae-zelandiae*	*Hieracium pilosella*	P-Olsen
Bradley et al. (2006)	Global Change Biol	(USA)	*Artemisia* sp.	*Bromus tectorum*	Total [C]
Caldwell (2006)	Applied Soil Ecology	California (USA)	Herbs and shrubs	*Cytisus scoparius*	Total [C], Total [N],], P-Olsen, C/N
Castro-Díez et al. (2009)	Biol Invasions	(Spain)	*Ulmus minor*, *Fraxinus angustifolia*	*Ailanthus altissima*, *Robinia pseudoacacia*	$[NH_4^+]$, $[NO_3^-]$

Chabreire et al. (2008)	Diversity Distributions	France	*Fagus sylvatica*, *Quecus robur*, *Carpinus betulus*, *Pinus sylvestris*	*Prunus serotina*	Total [C], Total [N], Total [P], $[NH_4^+]$, $[NO_3^-]$, P-Olsen
Chacón et al (2009)	Biol Fertility Soils	(Venezuela)	*Prosopis julifera*, *Opuntia* sp, *Taxodium distichum*	*Kalanchoe daigremontione*, *Stapelia gigantean*, *Melaleuca quiquinervia*	Total [C], Total [N], Total [P], P-Olsen, C/N
Chapuis-Lardy et al. (2006)	Biol Fertility Soils	(Belgium)	*Dactylis glomerata*, *Arrhenatherum elatium*	*Solidago altissima*	Total [C], Total [N]
Chen et al. (2009)	Biol Invasions	(China)	Native plants	*Mikania micrantha*	Total [C], Total [N], $[NH_4^+]$, $[NO_3^-]$
Chen et al. (2012)	Chinese J Plant Ecology	Taizhou (China)	Native herbs	*Soligago canadensis*	Total [N], Total [P], $[NH_4^+]$, $[NO_3^-]$, P-Olsen
Christian and Wilson (1999)	Ecology	Grassland National Park (Canada)	Bouteloua gracilis	Agropyron cristatum	Total [C], Total [N], C/N
Cuda et al. (2014)	Biol Invasions	(Czech Republic)	*Impatens noli-tangere*	*Impatens parviflora*, *Impatens gladulifera*	Total [C], Total [N]
Cusak and McCleery (2014)	Forest Ecology Management	(Puerto Rico)	Native forest species	*Albizia procera*, *Adenanthera pavonina*	Total [C], Total [N], $[NH_4^+]$, $[NO_3^-]$, P-Olsen
D'Antonio et al. (2001)	Conservation Biology: Research Priorities for the Coming Decade	New Zealand	Nothofagus salandri	Pseudotsuga menziesii	Total [N], Total [P], $[NH_4^+]$, $[NO_3^-]$, P-Olsen
Dassonville et al. (2011)	Biol Invasions	Belgium and France	*Urtica dioica*, *Alnus glutinosa*, *Fraxinus excelsior*, *Origanum vulgare*, *Daucus carota*, *Achillea millefoliaum*	*Fallopia* sp.	Total [C], Total [N], C/N
Debrowsky and Batten (2007)	Biol Invasions	California (USA)	Native herbs	*Aegilops truncialis*	Total [N], P-Olsen, $[K^+_{ext}]$
Dehlin et al. (2008)	New Zealand J Ecology	New Zealand	*Nothofagus salandri*	*Pseudotsuga menziesii*	Total [N], Total [P], $[NH_4^+]$, $[NO_3^-]$, P-Olsen
Desserud and Naeth (2013)	J Environmental Management	Alberta (Canada)	*Festuca hallii*	*Poa pratensis*	Total [C], Total [N], $[NH_4^+]$, $[NO_3^-]$, P-Olsen
Dickens et al. (2013)	Soil Biology Biochemistry	Rancho Palos Verde (USA)	*Artemisia californica*, *Eriognium cinereum*	*Brachipodium distachyon*, *Bromus diandrus*, *Avena* sp.	Total [C], Total [N], $[NH_4^+]$, $[NO_3^-]$, P-

					Olsen, C/N
Dickens and Allen (2014)	J Arid Environments	California (USA)	*Artemisia californica*	*Brachypodium distachum*	Total [N], $[NH_4^+]$, $[NO_3^-]$, P-Olsen
Dickie et al (2014)	AOB Plants	Canterbury (New Zealand)	*Poa cita*, *Carex comans*, *Coprosma robusta*, *Kunzea ericoides*	*Pinus contorta*, *Pseudotsuga menziesii*	Total [C], Total [N], Total [P], $[NH_4^+]$, $[NO_3^-]$, P-Olsen, C/N
Domenech et al., (2006)	Acta Oecologica	Catalonia (Spain)	*Trifolium pratense*, *Juncus acutus*, *Festuca arundinacea*	*Cortaderia selloana*	Total [N], C/N
Dreiss and Volin (2013)	Forest Ecology Management	Connecticut (USA)	*Pinus* sp, *Quercus* sp, *Populus tremuloides*, *Fraxinus americana*	*Robinia pseudoacacia*	$[NH_4^+]$, $[NO_3^-]$
Duda et al. (2003)	Biology Fertility Soils	Utah (USA)	*Ceratoides lantana*	*Halogeton glomeratus*	$[NH_4^+]$, $[NO_3^-]$, P-Olsen
Ehrenfeld et al. (2001)	Ecological Applications	(USA)	*Vaccinium* sp	*Berberis thunbergii*, *Microstegium vimineum*	$[NH_4^+]$, $[NO_3^-]$
Eliot and White (1987)	Forest Sci	Arizona (USA)	*Bouteloua gracilis*	*Dactylis glomerata*	$[NH_4^+]$, $[NO_3^-]$
Fan et al. (2010)	Geoderma	(China)	*Paspalum conjugatum*, *Cuscuta australis*	*Lantana camara*	Total [N], Total [P], P-Olsen
Fickbohn and Zhu (2006)	Applied Soil Ecology	New York (USA)	*Typha latifolia*	*Lythrum salicaria*	$[NH_4^+]$, $[NO_3^-]$
Fisher et al. (2006)	Plant Soil	Perth (Australia)	*Bansia atteemata*, *Banksia menzierii*, *Allocasuarina humilis*, *Conostylis aculeata*, *Macrozamia fraseri*, *Melaleuca systema*	*Briza maxima*, *Ehrharta calycina*, *Gladiolus caryophyllaceous*, *Pelargonium capitatum*	Total [C], Total [N], Total [P], P-Olsen, $[K^+_{ext.}]$
Gaertner et al. (2011)	Environmental Management	(South Africa)	Fynbos community	*Pennisetum clandestinum*	Total [C], Total [N], Total [P]
Garcia et al. (2012)	Gayana Botanica	Chile	Native forest and grassland	*Teline monspessulana*, *Acacia dealbata*	$[NH_4^+]$, $[NO_3^-]$, P-Olsen, $[K^+_{ext.}]$
Geddes et al. (2014)	Aquatic Ecology	Indiana (USA)	*Carex stricta*	*Thypa x Glauca*	$[NH_4^+]$, $[NO_3^-]$, P-Olsen
Gogo et al. (2011)	Biogeochemistry	France	*Callunal vulgaris*	*Molina caerulea*	Total [C], Total [N]
Gonzalez-Muñoz et al. (2012)	Forest Ecology Management	(Spain)	*Quercus robur*	*Acacia dealbata*	Total [N], $[NH_4^+]$, $[NO_3^-]$
Hagos and Smit (2005)	J Arid Environments	Pmfert (South Africa)	*Acacia erioloba*	*Acacia mellifera*	Total [N], Total [P]
Hall and Asner	Global Change	Hawaii (USA)	*Metrosideros*	*Myrica faya*	$[NH_4^+]$,

(2007)	Biology		*polymorpha*		$[NO_3^-]$, C/N
Haubensak and Parker (2004)	Plant Ecology	Washington state (USA)	*Festuca idahoensis*, *Aster curtis*	*Cytisus scoparius*	C/N
Hellman et al. (2011)	Acta Oecologica	(Portugal)	*Staurocanthus spectabilis*	*Acacia longifolia*	$[NH_4^+]$, $[NO_3^-]$, P-Olsen, $[K^+_{ext.}]$
Heneghan et al. (2006)	Applied Soil Ecology	Illinois (USA)	*Quercus alba*, *Quercus rubra*	*Rhamnus cathartica*	Total [C], Total [N], C/N
Herr et al. (2007)	J Plant Nutrition Soil Sci	Kraainem (Belgium)	*Achillea millefolium, Agrostis stolonifera, Holcus lanatus, Ranunculus repens*	*Solidago gigantea*	P-Olsen
Hook et al. (2004)	Ecosystems	Montana (USA)	*Festuca idahoensis, Stipa comata, Pascopyron smithii*	*Centaurea maculosa*	Total [C], Total [N]
Hoopes and Hall (2002)	Ecological Applications	California (USA)	*Sporolobus airoides*	*Hordeum murinum, Bromus diandrus*	$[NH_4^+]$, $[NO_3^-]$
Huang et al. (2015)	Estuarine Coastal Shelf Sci	Jiangsu (China)	*Suaeda salsa, Scirpus mariquete, Phragmites australis*	*Spartina alterniflora*	Total [N], Total [P], P-Olsen
Huebner et al. (2009)	Forest Ecology Management	Pensylvania USA	*Prunus pensylvanica, Fagus grandifolia, Acer saccharum*	*Berberis thunbergii, Rosa multiflora*	Total [C], Total [N]
Huebner et al. (2014)	Plant Soil	Ohio (USA)	*Kalmia latifolia*	*Rosa multiflora*	Total [P]
Irl et al. (2013)	Alpine Botany	(Switzerland)	*Papaver aurantiacum*	*Papaver croceum*	C/N
Iserman et al. (2007)	Applied Vegetation Sci	Frisian Islands	*Ammophila arenaria, Leymus arenaris, Carex arenaria, Aira praecox*	*Hippophaë rhamnoides*	Total [N], C/N
Jäger et al. (2013)	Plant Soil	Galapagos (Ecuador)	*Miconia robinsoniana*	*Cinchonia pubescens*	Total [C], Total [N], $[NH_4^+]$, $[NO_3^-]$, P-Olsen, $[K^+_{ext.}]$
Jandová et al. (2014)	Soil Biology Biochemistry	Slavkovsky reserve (Czech Republic)	Native shrubs	*Heracleum mantegazzianum*	P-Olsen
Janusaukaite et al. (2013)	Baltic Forestry	(Lithuania)	*Pinus sylvestris*	*Pinus mugo*	Total [C], Total [N], Total [P], C/N
Jo et al. (2015)	Biol Invasions	Syracuse NY (USA)	*Celastrus scandens*, *Eleagnus commutata*, *Frangula caroliniana*, *Lonicera*	*Berberis thunbergii*, *Celastrus orbicularis*, *Eleagnus multiflora*, *Rhamnus cathartica*, *Lonicera maacki*, *Lonicera*	Total [N], C/N

			canadensis, *Lonicera villosa*	*Morrowii*	
Johnston and Johnston (2004)	Arctic Antarctic Alpine Research	Australian Alps (Australia)	*Grevillea australis, Hovea montana, Poa helminii*	*Achillea millefolia*	Total [N], Total [P], $[K^+_{ext.}]$
Kappes et al. (2007)	Ecosystems	(Germany)	*Urtica dioica*	*Reynoutria* spp	Total [C], Total [N], P-Olsen, $[K^+_{ext.}]$
Kloeppel and Abrams (1995)	Tree Physiology	Pennesylvania (USA)	*Acer saccharum*	*Acer platanoides*	Total [N], P-Olsen, $[K^+_{ext.}]$
Kourtev et al. (1999)	Biol Invasions	New Jersey (USA)	*Vaccinium* spp	*Berberis vulgaris, Microstegium vimineum*	Total [N], $[NH_4^+]$, $[NO_3^-]$
Koutika et al. (2007)	Biology Fertility Soils	(Belgium)	*Epilobium hurrutium*, *Betula pendula*, *Fagus sylvatica*	*Solidago gigantea, Prunus serotina, Herracleum mantegazzianum*	Total [N]
Kueffer et al. (2008)	Functional Ecology	Morne Schychellis National Park (Seychelles)	*Northea hornei*	*Falcataria moluccana*, *Innamonium vermi*	Total [N], Total [P], $[NH_4^+]$, $[NO_3^-]$, C/N
Kulmatiski et al. (2006)	J Applied Ecology	Washington state (USA)	*Pseudoroegneria spicata*, *Balsamorhiza saggitatta*	*Centaurea diffusa, Bromus tectorum*	$[NH_4^+]$, $[NO_3^-]$, P-Olsen
Lanta et al. (2013)	Plant Ecology	(Finland)	*Prunus padus*	*Sorbus aucuparia*	Total [C], Total [N], P-Olsen, $[K^+_{ext.}]$
Larenas Parada et al. (2004)	Ecología Austral	(Argentina)	Native herbs	*Tithonia tubaeformis*	Total [C], Total [N], C/N, $[K^+_{ext.}]$
Lazzaro et al. (2014)	Sci Total Environment	Elba island (Italy)	*Quercus ilex*, *Erica arborea*	*Acacia dealbata*	Total [C], Total [N], $[NH_4^+]$, $[NO_3^-]$, P-Olsen, C/N
Lehnhoff et al. (2012)	Wetlands	Montana (USA)	Populus angustifolia, several native herbs	Tamarix sp.	$[NO_3^-]$, P-Olsen, $[K^+_{ext.}]$
Lesica and DeLuca (2004)	Plant Soil	Montana (USA)	*Salix discolor*	*Tamarix ramosissima*	Total [C], Total [N], P-Olsen, $[K^+_{ext.}]$
Lindsay and French (2005)	J Applied Ecology	(Australia)	*Banksia integrifolia*	*Chrysanthemoides monilifera* ssp. *rotundifolia*	Total [N]
Marchante et al. (2008)	Applied Soil Ecology	Portugal	Native forest species	*Acacia longifolia*	Total [C], Total [N], $[NH_4^+]$, $[NO_3^-]$, P-Olsen, $[K^+_{ext.}]$, C/N
Mack and D'Antonio	Ecological Applications	Hawaii (USA)	*Metrosideros polymorpha*	*Melinis minutiflora, Schizachyrium*	Total [C], Total [N],

(2003)				*condensatum*	C/N
Martin et al. (2009)	Biological Invasions	Florida (USA)	*Taxodium distichum*	*Melaleuca quiquinervia*	Total [C],Total [N], Total [P]
Martina et al. (2014)	Plant Soil	Michigan (USA)	*Carex* sp	*Phragmites australis*	Total [C], Total [N], C/N
Mcwan et al. (2012)	American Midland Naturalist	Kentucky (USA)	*Carya ovata*, *Carya lacinosa*, *Fraxinus americana*, *Quercus macrocarpa*, *Acer saccharum*	*Lonicera maackii*	Total [C], Total [N], $[NH_4^+]$, $[NO_3^-]$,$[K^+_{ext.}]$
Niu et al. (2007)	Plant Soil	Yunan (China)	*Digitaria chinensis*, *Artemisia annua*,	*Ageratina adenophora*	Total [C], Total [N], Total [P], P-Olsen, $[NH_4^+]$, $[NO_3^-]$,$[K^+_{ext.}]$
Noumi (2015)	J Arid Land	Tunisia	*Retama raetam*	*Haloxylon persicum*	Total [N], P-Olsen
Novoa et al. (2014)	Biol Invasions	Spain and Portugal	*Malcolmia littorea, Scabiosa atropurpurea*	*Carpobrotus edulis*	P-Olsen, $[NH_4^+]$, $[NO_3^-]$
Novoa et al. (2013)	Biol Conservation	Pontevedra (Spain)	*Malcolmia littorea*	*Carpobrotus edulis*	P-Olsen, $[NH_4^+]$, $[NO_3^-]$
Page et al. (2010)	Biol Invasions	Galicia (Spain)	*Juncus maritimus, Limonium dodortii*	*Spartina patens*	Total [N]
Parker and Schimel (2010)	Inv Plant Sci Management	California (USA)	*Bromus carinatus, Elymus glaucus, Nassella pulchra*	*Bromus hordeaceus, Bromus madritensis, Hordeum murinum*	P-Olsen, $[NH_4^+]$, $[NO_3^-]$
Pickart et al. (1998)	Restoration Ecology	California (USA)	*Artemisia pycnocephala*	*Lupinus arboreus*	$[NH_4^+]$, $[NO_3^-]$
Piper et al. (2015)	Plant Ecology	Saskatoon (Canada)	*Festuca hallii*, *Elymus* sp, *Pascopyrum* sp	*Bromus inermis*	Total [N] , $[NH_4^+]$, $[NO_3^-]$
Pritekel et al. (2006)	Applied Soil Ecology	Colorado (USA)	*Chondrosum gracile, Danthonia parryi, Purshia tridentata*	*Euphorbia esula, Cirsium arvense*	P-Olsen, $[K^+_{ext}]$, $[NO_3^-]$
Qin et al. (2014)	European J Soil Biology	China	*Urena lobata, Smilax bonamox, Garcinia mangostana*	*Ambrosia artemissifolia*	Total [N], Total [P], P-Olsen, $[K^+_{ext}]$
Rice et al. (2004)	Plant Ecology	New York (USA)	*Pinus rigida, Quercus ilicifolia, Quercus prinoides*	*Robinia psedoacacia*	Total [N], P-Olsen, $[K^+_{ext}]$, $[NO_3^-]$
Rout and Chrazanowsky (2009)	Plant Soil	Texas (USA)	*Schizachyrium scoparium*	*Sorghum halepense*	P-Olsen, $[K^+_{ext}]$, $[NO_3^-]$
Ruckli et al. (2014)	Forest Ecology Management	Switzerland	Native herbs	*Impatens glandulifera*	P-Olsen
Saggar et al. (1999)	Biology Fertility Soils	South Island (New Zealand)	*Leontodon taraxacoides*, *Carex breviculmis*	*Hieracum pilosella*	Total [N], Total [P],C/N
Sanon et al.	J Environmental	(Senegal)	Native herbs	*Amaranthus viridis*	Total

(2012)	Management				[C],Total [N], Total [P], P-Olsen
Scharfy et al. (2009)	J Vegetation Sci	Switzerland	*Carex flacca, Bromus erectus, Hypericum perforatum*	*Solidago gigantea*	Total [C],Total [N], Total [P], P-Olsen
Scott et al., (2001)	Ecological Applications	Eaitaki valley (New Zealand)	*Anthoxanthum odoratum, Poa cita*	*Hieracium pilosella*	Total [C],Total [N], C/N
Seabloom (2003)	PNAS	California (USA)	*Bromus carinatus, Elymus glaucus, Nassella cernua, Nassella pulchra, Poa secunda*	*Bromus madritensis, Hordeum murinum, Bromus hordeaceus*	$[NO_3^-]$
Shaben and Meyers (2010)	Plant Ecology	Vancouver Island (Canada)	Native shrubs	*Cytisus scoparius*	Total [C], Total [N], P-Olsen, $[K^+_{ext.}]$, C/N
Sharma and Dakshini (1998)	Plant Ecology	India	*Prosopis cineraria*	*Prosopis juliflora*	Total [C], P-Olsen, $[K^+_{ext.}]$
Smoliak and Dormaar (1985)	J Range Management	Manyberries (Canada)	*Stipa* sp.	Agropyron cristatum	Total [C],Total [N], C/N
Souza-Alonso et al. (2014)	Soil Biology Biochem	Ribeiro (Spain)	*Quercus robur, Quercus suber, Arbutus unedo*	*Acacia dealbata*	Total [C],Total [N], Total [P], P-Olsen, $[NH_4^+]$, $[NO_3^-]$, C/N
Souza-Alonso et al. (2015)	Soil Biology Biochem	Rivadavia (Spain)	*Quercus robur, Quercus suber, Arbutus unedo*	*Acacia dealbata*	Total [C],Total [N], Total [P], P-Olsen, $[NH_4^+]$, $[NO_3^-]$, C/N, $[K^+_{ext.}]$
Sperry et al. (2006)	Ecology	Canyolands National Park, Utah (USA)	*Achnatherum hymenoides*	*Bromus tectorum*	$[NH_4^+]$, $[NO_3^-]$
Stark and Norton (2014)	Oecologia	Colorado (USA)	*Artemisia tridentata*	*Bromus tectorum*	Total [C],Total [N], $[NH_4^+]$, $[NO_3^-]$, C/N,
Staska et al. (2014)	Basic Applied Ecology	(Austria)	*Fraxinus* sp., *Quercus* sp., *Ulmus* sp.	*Robinia pseudoacacia*	Total [C],Total [N], $[NO_3^-]$, C/N,
Sun et al. (2013)	Chinese Science Bulletin	Yunan (China)	*Myrsine africana*	*Eupatorium adenophorum*	Total [N], Total [P], P-Olsen, $[NH_4^+]$,

					$[NO_3^-]$
te Best et al. (2015)	Plant Ecology	Hluhluwe (South Africa)	*Panicum maximum, Sporobolus pyrimidalis*	*Chromolaena odorata*	Total [C],Total [N], $[K^+_{ext.}]$
Tererai et al. (2015)	River Research Applications	Western Cap town (South Africa)	*Diospyros glabra, Kiggelaria africana, Podocarpus elongatus, Searsia angustifolia*	*Eucalyptus camaldulensis*	Total [C], Total [N], Total [P], P-Olsen, $[NH_4^+]$, $[NO_3^-]$,$[K^+_{ext.}]$
Thorpe et al. (2006)	Applied Soil Ecology	Missoula Montana (USA)	*Festuca idahoensis*, *Lupinus sericeous*	*Centaurea maculosa*	Total [P]
Timisha et al. (2011)	Flora	Gorkha (Nepal)	Cynodon dactylon, *Imperata* sp., *Ipomoea* ap.	*Parthenium hysterophorus*	Total [N]
Tong et al. (2012)	Environmental Research	Fujian (China)	*Ranunculus cantonensis, Potentilla kleiniana, Imperata cylindrica*	*Solidago canadiensis*	Total [N], Total [P], P-Olsen, $[NH_4^+]$, $[NO_3^-]$
Truscott et al. (2008)	PPEES	Cloak Burn (Scotland)	*Urtica dioica*	*Mimulus guttatus*	Total [C],Total [N]
Válery et al. (2004)	Wetlands	Mont Saint-Michel Bay (France)	*Salicornia* spp., *Spartina* ssp.	*Elymus athericus*	Total [C]
Vanderhoeven et al. (2005)	Plant Soil	(Belgium)	*Holcus lanatus, Carex arenaria, Urticaria dioica, Juncus effusus, Achillea Millefolium*	*Solidago gigantea, Prunus serotina, Rosa rugosa, Fallopia japonica*	Total [N], $[K^+_{ext.}]$, P-Olsen, C/N
Von Holle et al. (2006)	Biodiversity Conservation	Massachusetts (USA)	*Quercus vetuklina, Quercus alba*	*Robinia pseudoacacia*	Total [N], P-Olsen, $[K^+_{ext.}]$
Vourtilis et al. (2011)	Forest Range Wildland Soils	Pantanal (Brazil)	*Gymnopogon spicatus*, *Mimosa pellita*	*Vochysia divergens*	P-Olsen, $[K^+_{ext.}]$
Walker et al. (2006)	Western North American Naturalist	Mojave desert (USA)	*Larrea tridentata*	*Tamarix* sp.	Total [N]
Wang et al. (2015a)	Plant Ecology	Fujian (China)	*Cyperus malaccensis*	*Phragmites australis*	Total [C],Total [N], Total [P], C/N
Wang et al. (2015b)	Catena	Fujian (China)	*Scirpus triquiter*	*Phragmites australis*	Total [C],Total [N], Total [P], $[NH_4^+]$, $[NO_3^-]$, C/N
Williams and Baruch (2000)	Biol Invasions	Arizona (USA)	Native herbs	*Eragrostis lehmanniana*	C/N
Windham and Ehrenfeld (2003)	Ecological Applications	New Jersey (USA)	*Spartina pattens*	*Phragmites australis*	Total [N]
Wolf et al. (2004)	J Biogeography	Colorado (USA)	*Juniperus scopulorum*	*Melilotus officinalis, Melilotus alba*	$[NH_4^+]$, $[NO_3^-]$,

					C/N
Yelenik et al. (2007)	Biol Invasions	Riverlands National Reserve (South Africa)	Fynbos	*Acacia saligna*	Total [N]
Yelenik et al. (2007)	Restoration Ecology	Cape town (South Africa)	Fynbos	*Acacia saligna*	Total [N], $[K^{+}_{ext.}]$
Yu et al. (2014)	Ecological Engineering	Yunan (China)	Understory native vegetation	*Ageratina adenophora*	Total [N], Total [P]
Zhang et al. (2009)	Applied Soil Ecology	(China)	*Citrus madurensis, Miscanthus floridulus, Clycine soja, Thalictrum fortunei*	*Solidago canadensis*	Total [C],Total [N], Total [P], $[NH_4^{+}]$, $[NO_3^{-}]$, P-Olsen
Zhou et al. (2008)	Pedosphere	Jiangsu (China)	Mudflat	*Spartina alterniflora*	Total [N], Total [P], $[NH_4^{+}]$, P-Olsen, C/N

Table S2. Articles with foliar information for invasive versus native plants.

Reference	Journal	Site	Native species	Invasive species	Foliar Variables
Aguilera et al. (2010)	Biol Invasions	Massachusetts (USA)	Native herbs	*Fallopia japonica*	[C], [N]
Alfred et al. (2010)	Biol Invasions	Oklahoma (USA)	*Andropogon gerardii*	*Lespedeza cuneata*	[N]
Asner and Vitousek (2005)	PNAS	Hawaii (USA)	*Metrosideros* sp.	*Myrica faya*	[N]
Barruch and Goldstein (1999)	Oecologia	Mauna Loa Hawaii (USA)	*Pelea* sp., *Metrosideros polymorpha*, *Chenopodium oahuense*, *Brussaia arguta*, *Freycinetia arborea*, *Dicranopteris linearis*	*Myria faya*, Melochia umbellata, *Clidemia hirta*, *Araliaceae* sp., *Hedychium gardnerianum*, *Arundina graminifolia*	[N]
Bellingham et al. (2005)	J Vegetation Sci	(New Zealand)	*Coriaria arborea*	*Buddleja davidii*	[N], [P]
Brym et al. (2011)	J applied Ecology	Michigan (USA)	Acer rubrum	*Eleagnus umbellata*	[N]
Busch and Smith (1995)	Ecological Monographs	Colorado river (USA)	*Salix gooddingii*, *Populus fremontii*, *Tessaria sericea*	*Tamarix ramosissima*	[N], [P], [K]
Castro-Díaz et al. (2009)	Biol Invasions	(Spain)	*Ulmus minor*, *Fraxinus angustifolia*, *Vaccinium corymbosma*	*Ailianthus altissima*, *Robinia pseudoacacia*, *Eleagnus umbellate*	[N]
Castro-Díaz et al. (2012)	Plant Soil	Orense and Alcalà de Henares (Sapin)	*Pinus pinaster*, *Quercus robur*, *Ulmus minor*, *Fraxinus angustifolia*	*Acacia dealbata*, *Ailanthus altissima*, *Eucalyptus globulus*, *Robinia pseudoacacia*, *Ulmus pumila*	[N]
Chapuis-Lardy et al. (2006)	Biol Fertility Soils	(Belgium)	*Dactylis glomerata*, *Arrhenatherum elatium*, *Agroastis stolonifera*, *Holcus lanatus*, *Achillea millefolium,* *Calamagrostis epigeios*	*Solidago altissima*	[P]
Christian	Ecology	Grassland	*Bouteloua gracilis*	*Agropyron*	[C], [N],

and Wilson (1999)		National Park Canada)		*cristatum*	C/N
Cuassolo et al. (2012)	Biol Invasions	Laguna fantasma (Argentina)	*Eleocharis pachicarpa*, *Carex aematorryncha*, *Eleocharis pachicarpa*	*Potentilla anserina*	[P], C/N
Dassonville et al. (2007)	Ecoscience	(Belgium)	Diverse native herbs	*Fallopia japonica*	[C], [N], [P], [K], C/N
De Mester and Richter (2010)	Ecological Applications	North Carolina (USA)	Native shrubs	*Microstegium vimineum*	C/N
Fan et al. (2010)	Geoderma	Guangdong (China)	*Paspalum conjugatum*, *Cuscuta australis*	*Lantana camara*	
Farnsworth and Meyerson (2003)	Wetlands	Connecticut (USA)	*Leersia oryzoides*	*Phragmites australis*	[N], C/N
Feng et al. (2007)	Photosynthetica	Yunnan (China)	*Gynura* sp	*Ageratina adenophora*, *Chromolaena odorata*	[N]
Feng et al. (2008)	Planta	Yunnan (China)	*Oxalis triangularis*, *Peperomia carperata*	*Oxalis corymbosa*, *Peperonia pallucida*	[N]
Feng (2008)	Physiologia Plantarum	Yunnan (China)	*Eupatorium chinense*, *Eupatorium heterophyllum*	*Eupatorium adenophorum*	[N]
Firn et al. (2012)	PlosOne	Queensland (Australia)	*Aristida personata*, *Eragrostis personata*	*Eragrostis curvula*	[N], [P], C/N
Fisher et al. (2006)	Plant Soil	Perth (Australia)	*Banksia atternata*, *Banksia menziesii*, *Allocasuarina humilis*, *Macrozania fraseri*, *Melaleuca systena*	*Briza maxima*, *Ehrharta calycina*, *Gladiolus caryophylloceus*, *Pelargonium capitatum*	[N], [P]
Funk (2005)	Biogeochemistry	Hawaii (USA)	*Metrosideros polymorpha*	*Hedychium gardnerianum*	[N]
Heberling and Fridley (2013)	New Phytologist	Europe	14 species	18 species	[C], [N]
Herr et al. (2007)	J Plant Nutrition Soil Sci	Kraainem (Belgium)	*Achillea millefolium*, *Agrostis stolonifera*, *Holcus lanatus*, *Ranunculus*	*Solidago gigantea*	[P]

			repens		
Hitreiter and Potts (2012)	Plant Ecology	New York (USA)	*Typha* sp.	*Phragmites australis*	[N]
Huebner et al. (2014)	Plant Soil	Ohio, Pensylvania, West Virginia (USA)	*Kalmia latifolia*	*Rosa multiflora*	[C], [N], C/N
Hughes and Denslow (2005)	Ecological Applications	Hawaii (USA)	*Metrosideros polymorpha*	*Falcataria moluccana*	[N], [P]
Jäger et al. (2013)	Plant Soil	Galápagos (Ecuador)	*Miconia robinsoniana*	*Cinchonia pubescens*	[C], [N], [P], [K], C/N
Jo et al. (2015)	Biol Invasions	New York (USA)	*Celastrus scandens*, *Eleagnus commutata*, *Frangula caroliniana*, *Lonicera canadensis*, *Lonicera villosa*	*Berberis thunbergii*, *Celastrus orbicularis*, *Eleagnus multiflora*, *Rhamnus cathartica*, *Lonicera maacki*, *Lonicera Morrowii*	[N], C/N
Kloeppel and Abrams (1995)	Tree Physiology	Pensylvania (USA)	*Acer saccharum*	*Acer platanoides*	[N], [P], [K]
Kraaij and Kramer (1999)	South African J Botany	Cape town (Suth Africa)	*Protea repens*, *Chrysanthemoides monilifera*, *Dodonaea viscosa*, *Leucadendron salignum*	*Acacia longifolia*, *Acacia saligna*	[N]
Kurokawa et al. (2010)	Functional Ecology	(New Zealand)	Diverse species	Diverse species	C/N
Kurten et al. (2008)	Biol Invasions	Hawaii (USA)	*Metrosideros polymospha*	*Mollera cerifera*	[N], [P]
Lannes et al. (2012)	New Phytologist	(Brazil)	Native herbs	Invasive herbs	[N], [P]
Leicht-Young et al. (2009)	American Midland Naturalist	(USA)	*Quercus rubra*	*Celastrus orbiculata*	[N], [P], [K], C/N
Leishman et al. (2007)	New Phytologist	(Australia)	*Eucalyptus* sp, *Banksia* sp	*Cardiospermum grandiflorum*, *Lantana camara*, *Ligustrum sinense*, *Protoasparagus aethiopicus*	[N], [P]
Meyerson et al. (2000)	Wetlands Ecology Management	Connecticut (USA)	*Thypa* sp, *Spartina alterniflora*	*Phragmites australis*	[N]

Morris et al. (2011)	Diversity Distributions	(South Africa)	*Pterocelastrus tricuspidatus*, *Protea repens*, *Chrysanthemoides monilifera*, *Dodonea viscosa*, *Leucadendron salignum*, *Leucospermum parile*, *Protea repens*	*Acacia cyclops*, *Acacia longifolia*, *Acacia saligna*	[N], [P]
Musil (1993)	J Applied Ecology	Cape coast (Sud Africa)	*Ericoid*, *Restioid* and *Proteoid* vegetation	*Acacia saligna*	[N], [P]
Nagel and Griffin (2001)	American J Botany	New York (USA)	*Erigeron pluladelphicus*, *Asclepias syriacca*, *Speraea latifolia*, *Solidago grandifolia*, *Erigeron pluladelphicus*	*Porthenocissus quinquenifolia*, *Lythrum quinquefolia*	[C], [N], C/N
Neves et al. (2010)	Wetlands	Reserva Natural do Sapal de Castro Marim (Portugal)	*Arthrocnemum macrostachyum*	*Spartina densiflora*	[N], [P], [K]
Niinemets et al. (2003)	Plant Cell Environment	Brasschaat (Belgium)	*Ilex aquifolium*	*Rhododendron ponticum*	[N]
Oliveira et al. (2014a)	PlosOne	Brazil	*Anadenanthera colubrina*	*Prosopis juliflora*	[N], [P], [K]
Oliveira et al. (2014b)	Soil Biology and Biochemistry	Brazil	*Anadenanthera colubrina*	*Prosopis juliflora*	[N], [P], [K]
Peñuelas et al. (2010)	Global Change Biology	Oahu (USA)	41 species	47 species	[C], [N], [P], [K], C/N
Sharma and Dalshini (1998)	Plant Ecology	(India)	*Prosopis cineraria*	*Prosopis juliflora*	P], [K]
Scharfy et al. (2009)	J. Vegetation Science	Switzerland	*Carex flacca, Bromus erectus, Hypericum perforatum*	*Solidago gigantea*	[N], [P]
Scharfy et al. (2011)	New Phytologist	Zürich (Switzerland)	*Molinia caerulea, Carex panicea, Calamagrostis epigeos, Succisa pratensis, Centaurea angustifolia, Mentha aquatica*	*Solidago gigantea, Solidago canadiensis, Impatens glandulifera*	[N]
Schoenfelder et al. (2010)	American J Botany	California (USA)	*Hieracum albiflorum*	*Hypochaeris radicata*	C/N
Scott et al.	Ecological	Eaitaki Valley	*Poa cita*	*Hieracium*	[N]

(2001)	Applications	(New Zealand)		*pilosella*	
Siemann and Rogers (2007)	J Ecology	Texas (USA)	Native herbs	*Sapium sebiferum*	[C], [N], [P]
Straton and Goldstein (2001)	Tree Physiology	Hawaii (USA)	*Diospyros sandwicensis, Metrosideros polymorpha, Nesolima polynesium, Nestegis sandwicensis, Pouteria sandwicnsis, Myoporum sandwicensis*	*Schinus terebinthifolius*	[N]
Svejcar and Sheley (2001)	J Arid Environments	Washington (USA)	*Artemisia tridentata*	*Bromus tectorum*	[C], [N], C/N
Thorpe et al. (2006)	Applied Soil Ecology	Montana (USA)	*Festuca idahoensis, Lupinus sericeous*	*Centaurea maculosa*	[P]
Thorpe et al. (2013)	PlosOne	Oregon (USA)	*Lupinus oreganus*, *Fragaria virginiana, Plantago lanceolata*	*Vicea* sp	[N]
Tong et al. (2001)	Environmental Research	Fujian (China)	*Cyperus malaccensis*	*Spartina alterniflora*	[C], [N], [K]
Urgenson et al. (2009)	Biol Conservation	Washington (USA)	*Alnus rubra*, *Salix* sp.	*Polygonum sachalinense*	C/N
Vinton and Goergen (2006)	Ecosystems	Nebraska (USA)	*Panicum virgatum*	*Bromus inermis*	C/N
Vinton and Burke (1995)	Ecology	Colorado (USA)	*Agropyron smithii, Stipa comate, Bouteloua gracilis, Aristida longiseta, Artemisia frigida*	*Carex eleocharis*	C/N
Vitousek and Walker (1989)	Ecological Monographs	Hawaii (USA)	*Metrosideros polimorphica*	*Myrica faya*	[N], [P]
Wang et al. (2015)	Plant Ecology	Fujian (China)	*Cyperus malaccensis*	*Phragmites australis*	[C], [N], [P], C/N
Windham and Ehrenfeld (2003)	Ecological Applications	New York (USA)	*Spartina patens*	*Phragmites australis*	[N]
Witwicki et al. (2013)	Oecologia	Oregon, Idaho (USA)	*Pseudoroegneria spicata, Artemisia tridentata*	*Bromus tectorum*	[N]
Witkowsky	J Applied	Cape coast	*Pterocelastrus*	*Acacia cyclops,*	[N], [P]

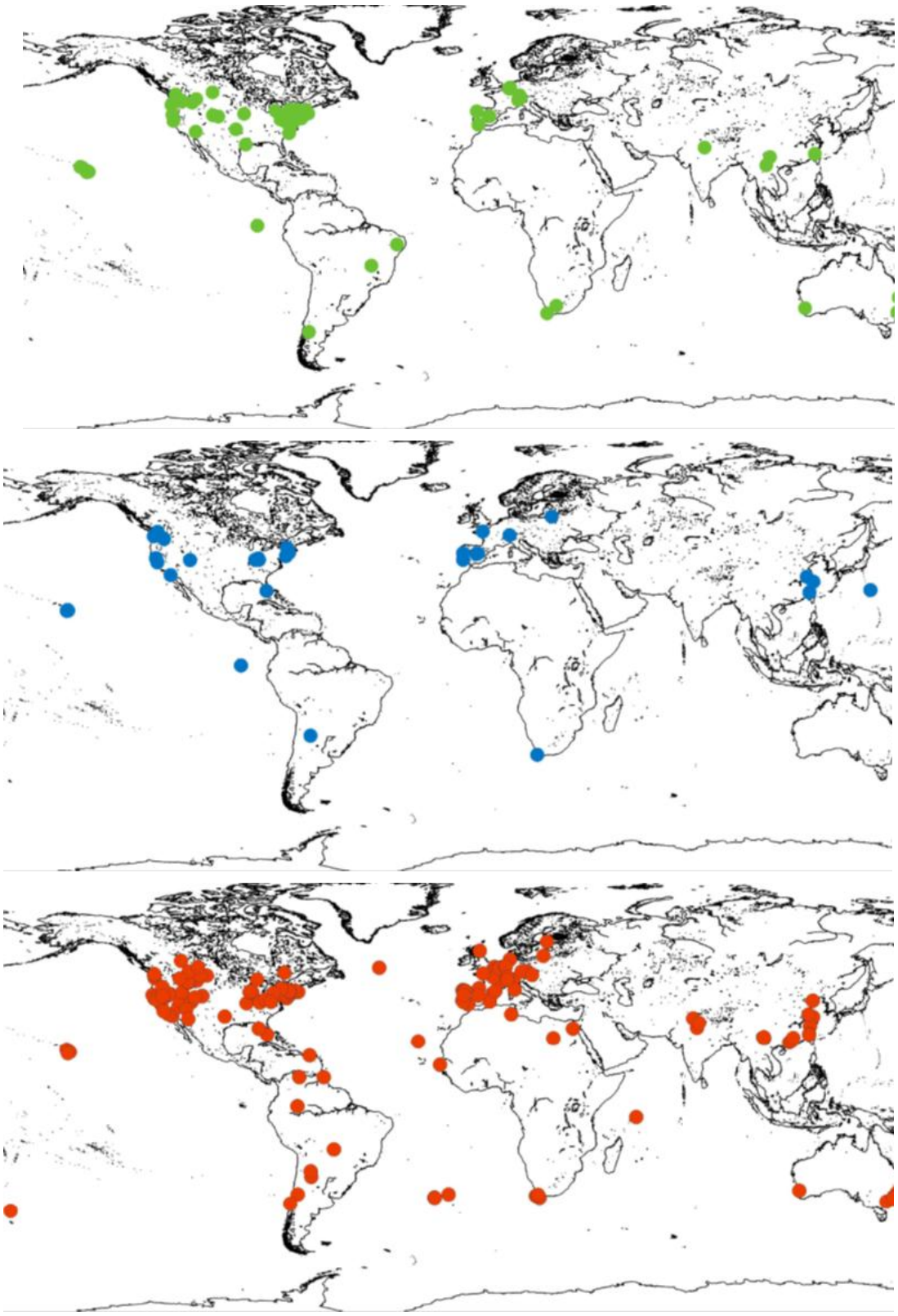
et al. (1991a)	Ecology	(South Africa)	*tricuspidatus, Leucospermum parile*	*Acacia saligna*	
Witkowsky et al. (1991b)	Functional Ecology	Cape coast (South Africa)	*Protea repens*	*Acacia saligna*	[N], [P]
Wolf et al. (2004)	J Biogeography	Colorado (USA)	*Juniperus scopulorum*	*Melilotus officinalis*	C/N
Xu et al. (2007)	Oecologia	New York (USA)	*Vaccinium corymbosa, Kalmia latifolia*	*Berberis thunbergii*	[N]
Zinnert et al. (2013)	Ecosphere	Virginia (USA)	*Vaccinium corymbosma, Clethra alnifolia*	*Eleagnus umbellate*	[N], C/N

Table S3. Articles with litter information for invasive versus native plants.

Reference	Journal	Site	Native species	Invasive species	Litter variables
Alonso et al. (2010)		Alcalà de Henares (Spain)	*Ulmus minor*, *Fraxinus angustifolia*	*Ailanthus altissima*, *Robinia pseudoacacia*	[N], C/N
Aragon et al. (2014a)	Plant Soil	Tucuman (Argentina)	*Cinnamomum porphyrium*, *Cupania vernalis, Myrsine laetevirens*	*Morus* sp., *Ligustrum vulgare*	[C], [N], [P], [K], C/N
Aragon et al. (2014b)	Acta Oecologica	Tucuman (Argentina)	*Cinnamomum porphyrium*, *Cupania vernalis*	*Morus* sp., *Ligustrum vulgare*	[C], [N], C/N
Arthur et al. (2012)	Plant Ecology	Kentucky (USA)	*Fraxinus* sp., *Carya* sp.	Lonicera maackii	[N], C/N
Asthon et al. (2005)	Ecological Applications	New York (USA)	*Acer rubrum*, *Vitis novae-angliae*, *Viburnum acerifolium*, *Cornus florida*	*Acer platanoides*, *Ampelopsis brevipedunculata*, *Lonicera morrowii*, *Rosa multiflora*	[N], C/N
Castro-Díez et al. (2009)	Biol Invasion	Castilla (Spain)	*Ulmus minor*, *Fraxinus angustifolia*	*Ailanthus altissima*, *Robinia pseudoacacia*	[N], C/N
Claeson et al. (2014)	Biol Invasion	Washington (USA)	*Alnus incata*, *Populs thichocarpa*	*Polygonum x bohemicum*	C/N
Debrowsky and Batten (2007)	Biol Invasion	California (USA)	Native forbs	*Aegilops triuncialis*	[N], [P], [K], C/N
Evans et al. (2001)	Ecological Applications	Utah (USA)	*Hilaria jamesii*	*Bromus tectorum*	[N], C/N
Funk (2005)	Biogeochemistry	Hawaii (USA)	*Metrosideros polymorpha*	*Hedychium gardnerianum*	[N], C/N
Godoy et al. (2010)	Oecologia	Madrid (Spain)	*Acer campestre*, *Lonicera etrusca*	*Pinus radiata*, *Acer negundo*	[C], [N], [P], [K], C/N
Going and Dudley (2008)	Bio Invasions	California (USA)	*Alnus rhombifolia*, *Salix* sp.	*Arundo donax*, *Tamarix ramossisima*	[N], C/N
Hata et al. (2012)	Weed Research	(Japan)	*Padanus boninensis*, *Schima*	*Casuarina equisetifolia*	[N]

			mertensiana		
Hellman et al. (2011)	Acta Oecologica	(Portugal)	*Staurocanthus spectabilis*	*Acacia longifolia*	[N], C/N
Hickman et al. (2013)	Oecologia	New York (USA)	*Prunus serotine*, *Rubus occidentalis*, *Viburnum acerifolium*, *Rubus allegheniensis*	*Rosa multiflora*, *Rubus phoenicolasius*, *Lonicera morrowii*, *Rubus phoenicolasius*	[N]
Jäger et al. (2013)	Plant Soil	Galápagos (Ecuador)	*Miconia robinsoniana*	*Cinchonia pubescens*	[C], [N], [P], [K], C/N
Janasuakaite and Straigyte (2001)	Baltic Forestry	Kaunas region (Lithuania)	*Acer platanoides*	*Acer pseudoplatanus*, *Acer negundo*	[C], [N], C/N
Janasuakaite et al. (2013)	Baltic Forestry	Curonion Laggon (Lithuania)	*Pinus sylvestris*	*Pinus mugo*	[C], [N], C/N
Kurokawa et al. (2010)	Functional Ecology	(New Zealand)	9 native N-fixer species, 11 native no N-fixer species	10 invasive N-fixer species, 11 invasive no N-fixer species	C/N
Liao et al. (2008)	Oecologia	Yangtze estuary (China)	*Scirpus mariquetor, Phragmites australis*	*Spartina alterniflora*	[N], C/N
Marchante et al. (2008)	Applied Soil Ecology	Sao Jacinto Dunes Reserve (Portugal)	Mediterranean shrubs	*Acacia longifolia*	[C], [N], C/N
Martin et al. (2009)	Biol Invasions	Florida (USA)	*Pinus elliottii*	*Melaleuca quinquinervia*	[C], [N], [P]
Martin et al. (2010)	J Aquatic Plant Management	Florida (USA)	*Pinus elliottii*, *Taxodium distichum*	*Melaleuca quinquinervia*	[C], [N], [P]
McKenzie et al. (2013)	Freshwater Sci	Hawaii (USA)	*Metrosideros polymorpha*	*Falcataria moluccana*	[C], [N], C/N
Piper et al. (2015)	Plant Ecology	California (USA)	*Festuca hallii*, *Elymus* sp, *Pascopyrum* sp	*Bromus inermis*	C/N
Poulette and Arthur (2012)	Ecological Applications	Kentucky (USA)	*Fraxinus quadrangulata*, *Quercus muehlenbergii*, *Carya ovata*	*Lonicera maackii*	[N], C/N

Rice et al. (2004)	Plant Ecology	New York (USA)	*Pinus rigida*	*Robinia pseudoacacia*	[C], [N], C/N
Rothstein et al. (2004)	Ecosystems	Hawaii (USA)	*Metrosideros polymorpha*	*Fraxinus udhei*	[N], [P]
Scharfy et al. (2010)	New Phytologist	Zürich (Switzerland)	*Molinia caerulea, Carex panicea, Calamagrostis epigeos, Succisa pratensis, Centaurea angustifolia, Mentha aquatica*	*Solidago gigantea, Solidago canadiensis, Impatens glandulifera*	[C], [N], C/N
Svejcar et al. (2001)	J Arid Environments	Washington (USA)	*Artemisia tridentata*	*Bromus tectorum*	[C], [N], C/N
Tong et al. (2001)	Environmental Research	Fujian (China)	*Cyperus malaccensis*	*Spartina alterniflora*	[C], [N], [P], C/N
Trammet et al. (2012)	Biol Invasions	Kentucky (USA)	*Acer saccharum*	*Lonicera maackii*	[N]
Tuttle et al. (2009)	Biol Invasions	Hawaii (USA)	*Metrosideros polymorpha*	*Falcataria moluccana*	[C], [N], C/N
Urgenson et al. (2009)	Biol Conservation	Washington (USA)	*Alnus rubra*, *Salix* sp.C/N	*Polygonum sachalinense*	C/N
Valéry et al. (2004)	Wetlands	Mont Saint-Michel Bay (France)	*Salicornia* spp., *Sapartina* ssp.	*Elymus athericus*	C/N
Vitousek and Walker (1999)	Ecological Monographs	Hawaii (USA)	*Metrosideros polymorpha*	*Myrica faya*	[N], [P]
Wang et al. (2015)	Plant Ecology	Fujian (China)	*Cyperus malaccensis*	*Phragmites australis*	[C], [N], [P], C/N
Windham and Ehrenfeld (2003)	Ecological Applications	New Jersey (USA)	*Spartina patens*	*Phragmites australis*	[N], C/N
Wolkovich et al. (2010)	Global Change Biol	California (USA)	*Artemisia californica*	*Bromus machitensis*	[C], [N], C/N
Yelenik et al. (2007)	Biol Invasions	Cape town (South Africa)	Fynbos, Native grasses	*Acacia saligna*, *Lupinus luteus*	



(A)

(B)

(C)

Figure S1. Geographical localization of the studies where elemental concentrations (N and P) and stoichiometry (C:N) in photosynthetic tissues of successful invasive pants and its native competitor plants (A), where elemental concentrations (N and P) and stoichiometry (C:N) in leaf litter of successful invasive pants and its native competitor plants (B), where total elemental concentrations (C, N and P), nutrient availability (ammonium, nitrate, P-Olsen and extractable-K) and stoichiometry (C:N) in soils under successful invasive plants and under their native competitor plants (C) were reported and used in the meta-analyses.

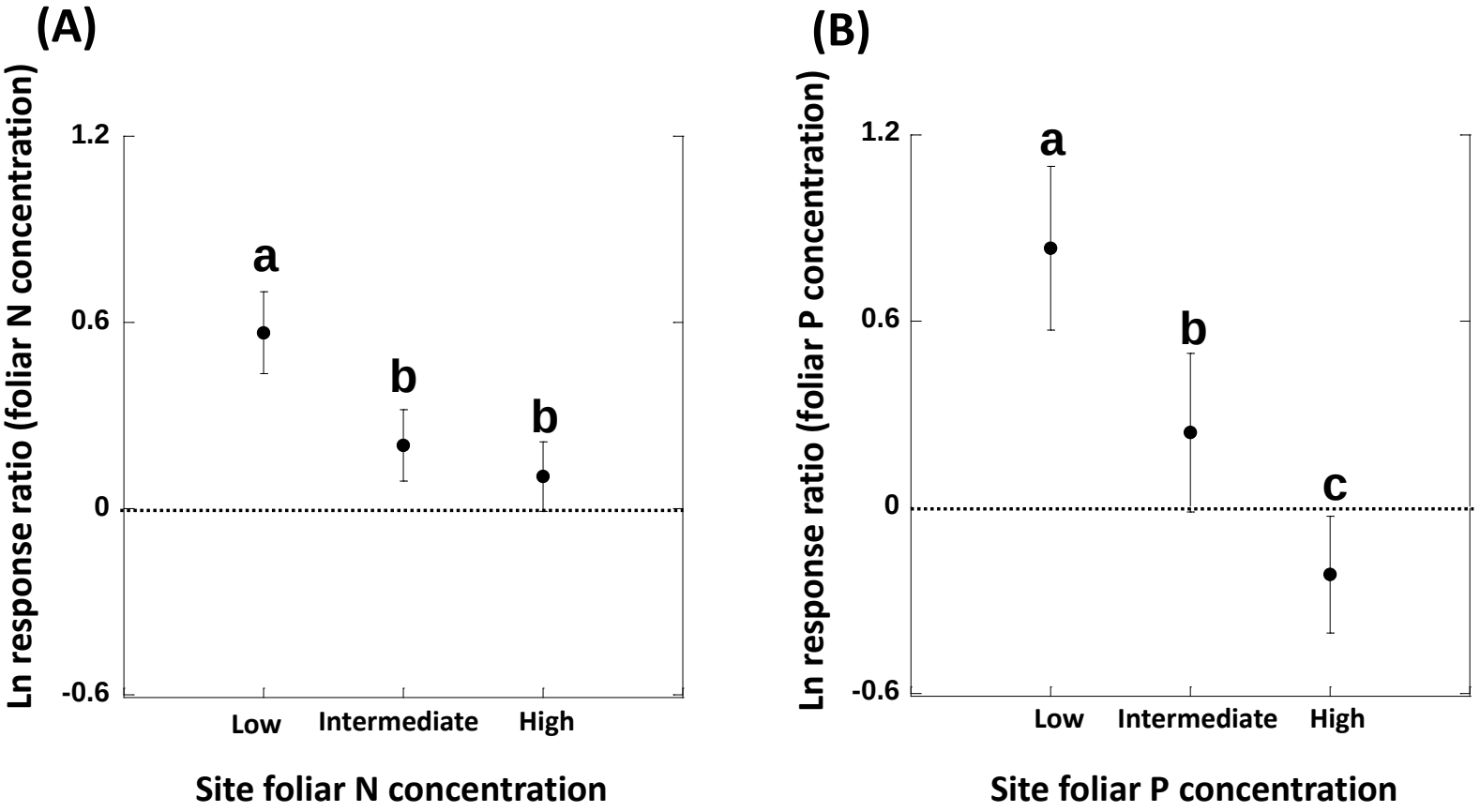


Figure S2. Differences of ln response ratio of total N (A) and P (B) concentrations in the photosynthetic tissues at different levels of the variable in the native environment. The bars represent the confidence intervals (95%). The different letters indicate significant differences at the $P < 0.05$ level.

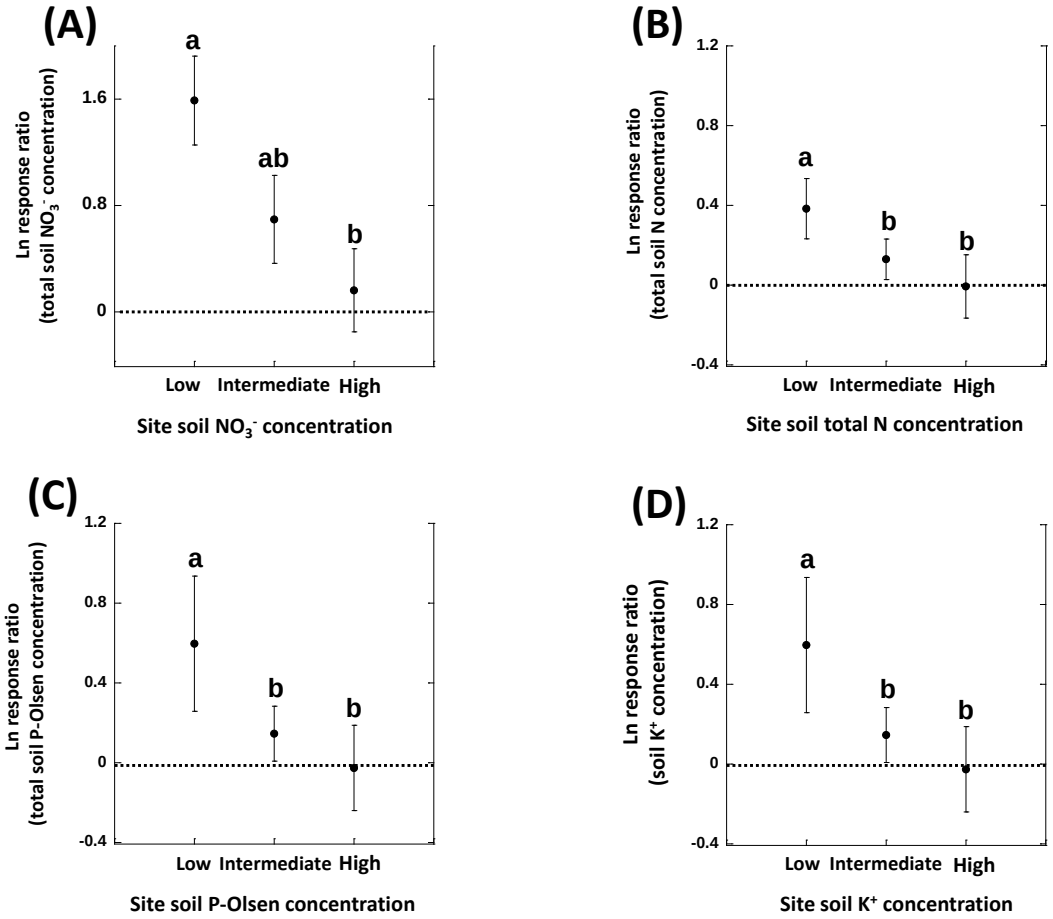


Figure S3. Differences of ln response ratio of soil NO3- concentration (A), soil total N content (B), soil P-Olsen (C) and and soil K^+ concentration (D) at different levels of the variable in the native environment. The bars represent the confidence intervals (95%). The different letters indicate significant differences at the $P < 0.05$ level.

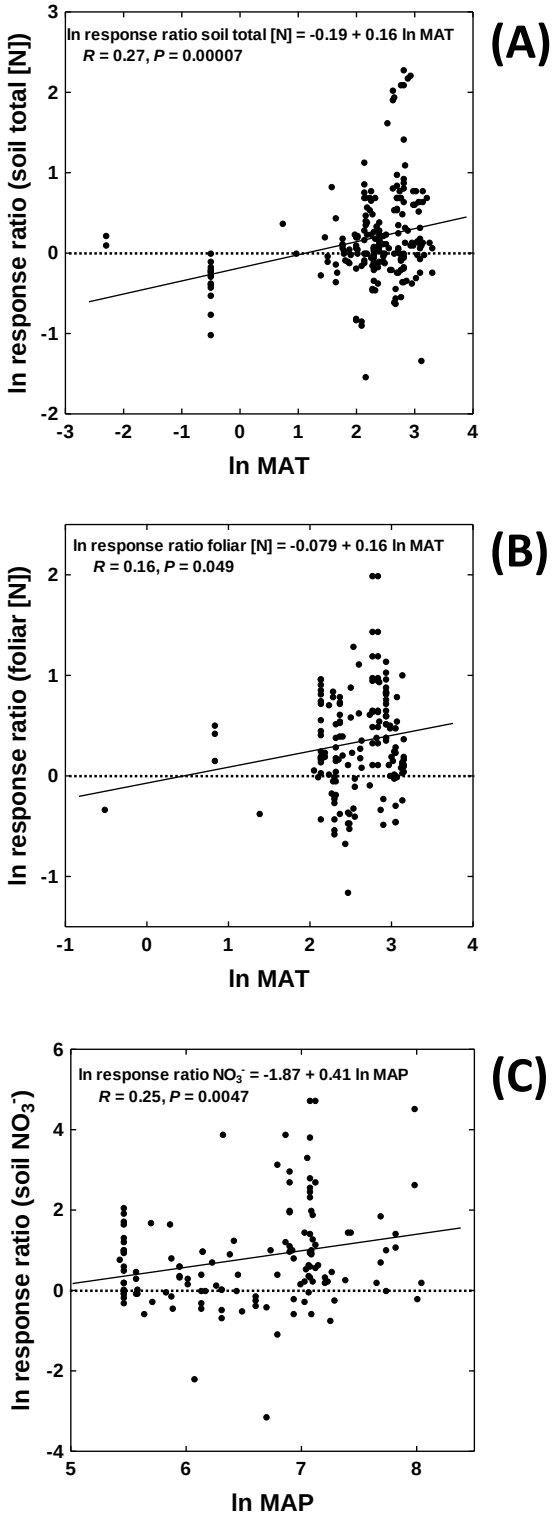


Figure S4. Relationships of the ln response ratio of soil total [N] (A) and foliar [N] (B), with ln MAT, and relationships between invasive response ratio of soil NO_3^- concentration with ln MAP (C).

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