



## DIVERSITY PATTERNS AND CONSERVATION STATUS OF NATIVE ARGENTINEAN CRUCIFERS (BRASSICACEAE): APPENDIX II

Diego L. Salariato  & Fernando O. Zuloaga 

**Appendix 2.** Preliminary threat assessments (VU, EN, and CR categories) for Argentinean species based on the IUCN red list categories and criteria. The EOO (extent of occurrence) was calculated with a minimum convex polygon around occurrence points and clipped to the extent of Argentina. For species with less than three unique occurrences (EOO cannot be computed), area of occupancy (AOO) was reported. Number of locations were registered counting number of cells of 0.1 arc-degrees (~100 km<sup>2</sup>) occupied by the occurrences of each species. Distribution range maps for each species associated to this preliminary threat assessment are shown in Appendix 1. Ecoregions and biomes sensu Olson et al. (2001).

*Alshehbazia friesii* (O.E. Schulz) Salariato, Zuloaga & Al-Shehbaz

Tribe: Eudemeae. Status: native (Argentina, Bolivia, Chile, Peru). AOO: 4 km<sup>2</sup>. Number of locations: 1. IUCN category: CR B1ab(iii).

*Alshehbazia friesii* is distributed along the Andean Puna regions in Argentina, Bolivia, Chile and Peru, but the species appears to be very rare, as evidenced from the few collections in each of these countries. For Argentina only the type collection from Salta province is known. For this species of restricted distribution and scarce populations it is presumed that one or more threat factors may act (e.g. habitat destruction, mining, and global warming).

*Alshehbazia hauthalii* (Gilg & Muschl.) Salariato & Zuloaga

Tribe: Eudemeae. Status: native (Argentina, Chile). EOO: 4488 km<sup>2</sup>. Number of locations: 4. IUCN category: EN B1ab(iii).

*Alshehbazia hauthalii* is restricted to the southern Andes of Argentina (Santa Cruz province) and Chile (Region XII). In Argentina this species presents restricted distribution range and scarce populations. The area, extent and quality of its habitat can be affected by one or more threat factors as habitat destruction and overgrazing.

*Aschersoniodoxa cachensis* (Speg.) Al-Shehbaz

Tribe: Eudemeae. Status: native (Argentina, Bolivia, Peru). EOO: 19441 km<sup>2</sup>. Number of locations: 4. IUCN category: VU B1ab(iii).

This species inhabits the highlands of the Andes in Argentina, Bolivia and Peru. However, for Argentina (Catamarca, Jujuy, Salta and Tucumán provinces) collections are scarce and the most recent are from 1970. In this species, of restricted distribution and scarce populations, it is presumed that one or more threat factors may act (e.g. habitat destruction, mining, and global warming). *Aschersoniodoxa cachensis* has been categorized globally by the IUCN red list as Least Concern (LC), however, its restricted distribution in Argentina, and the scarcity of its populations lead to its regional categorization as Vulnerable (VU).

*Cardamine rostrata* Griseb.

Tribe: Cardamineae. Status: native (Argentina, Chile). AOO: 4 km<sup>2</sup>. Number of locations: 1. IUCN category: CR B1ab(iii).

This species inhabits in Argentina and Chile, growing in humid areas of the Magellanic Subpolar forests. However, no material of this species has been recently collected in Argentina, and the only record for the country corresponds to the type of

*Cardamine rostrata* var. *dichondroides* Speg. (*Illin s.n.*, LP) collected in the province of Chubut more than a century ago. Due to the scarcity of collections it is presumed that this species may be sensitive to different threat factors, such as habitat destruction and overgrazing.

***Cardamine tuberosa* DC.**

Tribe: Cardamineae. Status: native (Argentina, Chile). AOO: 4 km<sup>2</sup>. Number of locations: 1. IUCN category: CR B1ab(iii).

This species inhabits in Argentina and Chile, mainly in humid areas of the Valdivian temperate and Magellanic Subpolar forests. However, no material of this species has been recently collected in Argentina, and the only record for the country corresponds to the type of *Cardamine tuberosa* DC. var. *velutina* Speg. (*Illin s.n.*, LP) collected in the province of Chubut more than a century ago. Due to the scarcity of collections it is presumed that this species may be sensitive to threat factors as habitat destruction and overgrazing.

***Chilocardamum longistylum* (Romanczuk)**

Al-Shehbaz

Tribe: Thelypodieae. Status: endemic (Argentina). AOO: 8 km<sup>2</sup>. Number of locations: 2. IUCN category: EN B1ab(iii).

*Chilocardamum longistylum* is a species endemic to Argentina and distributed mainly along the Patagonian steppe. So far only three collections of the species have been registered, two from the province of Chubut (*Soriano 3861* and *2118*, BAA) and one from Neuquén (*Comber 51*, E). Due to the scarcity of collections it is presumed that this species may be sensitive to different threat factors as habitat destruction, overgrazing and global warming.

***Chilocardamum onuridifolium* (Ravenna)**

Al-Shehbaz

Tribe: Thelypodieae. Status: endemic (Argentina). EOO: 702 km<sup>2</sup>. Number of locations: 3. IUCN category: EN B1ab(iii).

*Chilocardamum onuridifolium*, endemic to the southern Patagonian steppe in Chubut and Santa Cruz provinces, is represented by a few collections more than 50 years old. For this species of restricted

distribution and scarce populations it is presumed that can be affected by one or more threat factors (as habitat destruction, overgrazing, and global warming).

***Cremolobus chilensis* (Lag. ex DC.) DC.**

Tribe: Cremolobeae. Status: native (Argentina, Bolivia, Chile, Peru). AOO: 3613 km<sup>2</sup>. Number of locations: 3. IUCN category: EN B1ab(iii).

This species is distributed along the Andes of Argentina, Chile, Bolivia, and Peru. However, in Argentina only a few collections have been registered for the provinces of Jujuy and Tucumán, and no material of this species has been collected recently. Due to the scarcity of collections in Argentina it is presumed that this species may be sensitive to different threat factors as habitat destruction, overgrazing and global warming.

***Delpinophytum patagonicum* (Speg.) Speg.**

Tribe: Eudemeae. Status: endemic (Argentina). EOO: 16201 km<sup>2</sup>. Number of locations: 3. IUCN category: VU B1ab(iii).

This species is endemic to southern Patagonian steppe in Argentina, and although its populations have been collected in recent years, the low number of locations and the restricted distribution range renders this species potentially sensitive to threat factors associated to Patagonia such as habitat destruction, overgrazing and global warming.

***Dictyophragmus punensis* (Romanczuk)**

Al-Shehbaz

Tribe: Thelypodieae. Status: endemic (Argentina). EOO: 1893 km<sup>2</sup>. Number of locations: 6. IUCN category: VU B1ab(iii).

*Dictyophragmus punensis*, endemic to the Central Andean Puna in the Jujuy province, shows a restricted distribution range, which increases the sensitivity of this species to threat factors associated with the Argentinean Central Puna, such as habitat destruction, mining, and global warming.

***Draba burkartiana* O.E. Schulz**

Tribe Arabideae. Status: endemic (Argentina). EOO: 6864 km<sup>2</sup>. Number of locations: 7. IUCN category: VU B1ab(iii).

*Draba burkartiana* is endemic of Argentina and restricted so far to the provinces of Catamarca, Salta and Tucumán. This species mainly inhabits in the Southern Andean Yungas and Central Andean Puna of these provinces, and due to its reduced distribution range, it may be potentially vulnerable to threat factors affecting these environments (e.g., habitat destruction, overgrazing and reduction of its ecological niche by global warming).

***Draba lapaziana*** Al-Shehbaz

Tribe Arabideae. Status: native (Argentina, Bolivia). EOO: 4915 km<sup>2</sup>. Number of locations: 3. IUCN category: EN B1ab(iii).

This species is distributed along the Central Andean Puna of Argentina and Bolivia. For Argentina there are only a few collections from Salta and Tucumán, indicating that the species is rare and has a reduced distribution range in the country. Therefore, the species is potentially sensitive to threat factors (e.g. habitat destruction, overgrazing global warming).

***Exhalimolobos burkartii*** (Romanczuk & Boelcke) Al-Shehbaz & C.D. Bailey

Tribe: Halimolobeae. Status: endemic (Argentina). EOO: 9208 km<sup>2</sup>. Number of locations: 3. IUCN category: VU B1ab(iii).

Endemic species of northwestern Argentina, where it grows in the provinces of Jujuy and Tucumán, mainly in the Southern Andean Yungas region. It is known only from a few collections that define a restricted distribution range, so it is presumed that it can be affected by different threat factors such as habitat destruction or global warming.

***Lepidium burkartii*** Boelcke

Tribe: Lepidieae. Status: endemic (Argentina). EOO: 943 km<sup>2</sup>. Number of locations: 3. IUCN category: EN B1ab(iii).

This endemic species of Argentina is restricted to the province of Entre Ríos and grows mainly in the Humid Pampas region. It has a restricted distribution range and is known by only a few collections, which suggest that this species is sensitive to the threat factors affecting this region such as overgrazing, over-exploitation, and habitat destruction.

***Lepidium hickenii*** Al-Shehbaz

Tribe Lepidieae. Status: endemic (Argentina). EOO: 19840 km<sup>2</sup>. Number of locations: 4. IUCN category: VU B1ab(iii).

*Lepidium hickenii* is an endemic species restricted to the Humid Pampas of Buenos Aires province and only known by a few collections. The restricted distribution and scarcity of populations of this species suggest its vulnerability to the threat factors affecting this region such as over-exploitation, aridification, and overgrazing.

***Lepidium jujuyanum*** Al-Shehbaz

Tribe Lepidieae. Status: endemic (Argentina). EOO: 11208 km<sup>2</sup>. Number of locations: 6. IUCN category: VU B1ab(iii).

*Lepidium jujuyanum* is an endemic species restricted to the Central Puna in the Jujuy province. Due to its restricted geographical range it is susceptible to the threat factors affecting the Argentinian Puna such as habitat destruction, mining, and global warming.

***Lepidium reichei*** Phil. ex Reiche

Tribe: Lepidieae. Status: native (Argentina, Chile). EOO: 221 km<sup>2</sup>. Number of locations: 3. IUCN category: EN B1ab(iii).

This species inhabits Chile and Argentina, however, for Argentina is restricted to the High Monte of San Juan, so its presence in this country is highly sensitive to environmental changes as habitat destruction, mining, and global warming.

***Lepidium santacruzensis*** Al-Shehbaz

Tribe: Lepidieae. Status: endemic (Argentina). AOO: 4 km<sup>2</sup>. Number of locations: 1. IUCN category: CR B1ab(iii).

This endemic species inhabits the southern Patagonian steppe (Santa Cruz province) and so far is only known by the type specimen (*Correa et al. 2541*, BAA), so it is highly sensitive to the threat factors present in the region such as habitat destruction, overgrazing, and biological invasions.

***Lepidium serratum*** (Poir.) Al-Shehbaz

Tribe: Lepidieae. Status: native (Argentina, Uruguay). EOO: 19582 km<sup>2</sup>. Number of locations: 3. IUCN category: VU B1ab(iii).

This species is distributed in Argentina and Uruguay, growing in Argentina primarily along the Southern Cone Mesopotamian savanna and Humid Pampas ecoregions of Corrientes and Entre Ríos provinces. Due to its restricted geographic range, its presence in the country is vulnerable to threat factors such as overgrazing, over-exploitation, habitat destruction and global warming.

***Lithodrava mendocinensis*** (Hauman) Boelcke

Tribe: Lepidieae. Status: endemic (Argentina). EOO: 16250 km<sup>2</sup>. Number of locations: 10. IUCN category: VU B1ab(iii).

*Lithodrava mendocinensis* is a species endemic to the Southern Andean steppe and Patagonian steppe ecoregions in Mendoza and Neuquén provinces. Due to its restricted distribution range, its presence in the country is vulnerable to threat factors such as overgrazing, over-exploitation, habitat destruction and global warming.

***Mancoa foliosa*** (Wedd.) O.E. Schulz

Tribe: Halimolobeae. Status: native (Argentina, Bolivia). AOO: 8 km<sup>2</sup>. Number of locations: 2. IUCN category: EN B1ab(iii).

*Mancoa foliosa* inhabits the Puna of Argentina (Jujuy and Tucumán) and Bolivia. However, in Argentina it is known for a few collections. The scarcity of its populations, coupled with the restricted distribution, suggests the sensitivity of its presence in the country to different threat factors as habitat destruction, mining, and global warming.

***Menonvillea cicatricosa*** (Phil.) Rollins

Tribe: Cremolobeae. Status: native (Argentina, Chile). EOO: 12 km<sup>2</sup>. Number of locations: 1. IUCN category: CR B1ab(iii).

This species is distributed along the highlands of the Southern Andean steppe ecoregion in Chile and Argentina. However, in the latter country

its distribution range is restricted to the southwestern portion of the province of Mendoza. The scarcity of its populations, coupled with its restricted distribution, suggests the sensitivity of its presence in the country to different threat factors as habitat destruction, overgrazing, and global warming.

***Menonvillea comberi*** Sandwith

Tribe: Cremolobeae. Status: native (Argentina, Chile). EOO: 744 km<sup>2</sup>. Number of locations: 3. IUCN category: EN B1ab(iii).

*Menonvillea comberi* grows in the south of Argentina (Rio Negro and Neuquén) and Chile, on mountain slopes associated with the Valdivian Temperate forest ecoregion. Nevertheless, in Argentina the species is known only for a few collections, so both due to the scarcity of its populations and the restricted distribution range its presence in Argentina is sensitive to different threat factors such as habitat destruction, overgrazing, and global warming.

***Menonvillea famatinensis*** (Boelcke) Rollins

Tribe: Cremolobeae. Status: endemic (Argentina). EOO: 26 km<sup>2</sup>. Number of locations: 3. IUCN category: EN B1ab(iii).

This species is endemic to the High Monte of the Famatina mountain range in La Rioja province. Distribution range of this species is markedly reduced (micro-endemic) so its presence is sensitive to environmental alterations such as habitat destruction, mining, overgrazing, and global warming.

***Menonvillea rigida*** Rollins

Tribe: Cremolobeae. Status: endemic (Argentina). EOO: 4831 km<sup>2</sup>. Number of locations: 9. IUCN category: VU B1ab(iii).

*Menonvillea rigida* is a species endemic to the highlands of Río Negro and Neuquén provinces within the Valdivian Temperate forest ecoregion. Its distribution, restricted to mountain slopes above the treeline, is potentially vulnerable to threat factors present in this region such as habitat destruction, overgrazing, global warming.

***Menonvillea zuloagaensis*** Al-Shehbaz

Tribe: Cremolobeae. Status: endemic (Argentina).  
AOO: 4 km<sup>2</sup>. Number of locations: 1. IUCN category:  
CR B1ab(iii).

*Menonvillea zuloagaensis* is restricted to the San Guillermo National Park in San Juan province, inhabiting areas of the Central Andean Puna. So far, the species is known only by the type collection (*Nicora et al.* 8262, BAA), so its presence is highly sensitive to environmental changes such as overgrazing and global warming.

***Mostacillastrum carolinense*** (Scappini, C.A. Bianco & Prina) Al-Shehbaz

Tribe: Thelypodieae. Status: endemic (Argentina).  
AOO: 4 km<sup>2</sup>. Number of locations: 1. IUCN category:  
CR B1ab(iii).

This species is restricted to the province of San Luis (Coronel Pringles department) in areas of the Dry Chaco ecoregion corresponding to the Comechingones phytogeographic province. The species is only known for a few collections, so the scarcity of its populations coupled with its restricted distribution suggest the sensitivity of its presence in the country to different threat factors as habitat destruction, overgrazing, and global warming.

***Mostacillastrum dianthoides*** (Phil.) Al-Shehbaz

Tribe: Thelypodieae. Status: native (Argentina, Chile, Peru).  
EOO: 4762 km<sup>2</sup>. Number of locations: 5. IUCN category: EN B1ab(iii).

This species inhabits the north of Argentina, north of Chile and south of Peru; in Argentina it grows in rocky creeks and mountain slopes of the Central Andean Puna in the province of Jujuy. The restricted range of distribution in Argentina makes its presence sensitive to different threat factors (e.g. habitat destruction, mining, and global warming).

***Mostacillastrum hunzikeri*** Al-Shehbaz

Tribe: Thelypodieae. Status: endemic (Argentina).  
EOO: 219 km<sup>2</sup>. Number of locations: 3. IUCN category: EN B1ab(iii).

Endemic species of Argentina, where it grows in the provinces of Catamarca and La Rioja along the

Dry Chaco ecoregion. The species is known only for a few collections, so both due to the scarcity of its populations and the restricted distribution range its presence is potentially sensitive to different threat factors such as habitat destruction, and global warming.

***Mostacillastrum saltaensis*** Al-Shehbaz

Tribe: Thelypodieae. Status: endemic (Argentina).  
AOO: 4 km<sup>2</sup>. Number of locations: 1. IUCN category: CR B1ab(iii).

*Mostacillastrum saltaensis* is an endemic restricted to the Southern Andean Yungas of Salta province. So far it is only known by the type collection. Therefore, it is presumed that one or more threat factors, such as habitat destruction, overgrazing, and global warming, may affect its presence.

***Mostacillastrum ventanense*** (Boelcke) Al-Shehbaz

Tribe: Thelypodieae. Status: endemic (Argentina).  
EOO: 116 km<sup>2</sup>. Number of locations: 3. IUCN category: EN B1ab(iii).

This endemic species inhabits on hills of southern Buenos Aires province (Cura-Malal and Sierra de la Ventana mountain systems). Although it has been recently collected, its populations are scarce, and together with the restricted distribution range, make it potentially vulnerable to different threat factors of the region (e.g. habitat destruction, overgrazing, and global warming).

***Neuontobotrys choiquense*** (Romanczuk) Al-Shehbaz

Tribe: Thelypodieae. Status: endemic (Argentina).  
EOO: 5932 km<sup>2</sup>. Number of locations: 3. IUCN category: VU B1ab(iii).

This species, endemic to the Southern Andean steppe of Mendoza and the Patagonian steppe of Neuquén, is known only for a few collections, so both due to the scarcity of its populations and the restricted distribution range its presence is potentially sensitive to different threat factors such as habitat destruction, overgrazing, and global warming.

***Neuontobotrys mendocina*** (Romanczuk) Al-Shehbaz

Tribe: Thelypodieae. Status: native (Argentina, Chile). EOO: 9021 km<sup>2</sup>. Number of locations: 4. IUCN category: VU B1ab(iii).

*Neuontobotrys mendocina* is distributed in Chile and Argentina, growing in the latter country along the Southern Andean steppe in San Juan and Mendoza provinces. The restricted distribution range of this species, coupled with the scarcity of its populations, suggest its potential sensitivity to environmental alterations resulting from different threat factors such as habitat destruction, mining, overgrazing, and global warming.

***Neuontobotrys polyphylla*** (Phil.) Al-Shehbaz

Tribe: Thelypodieae. Status: native (Argentina, Chile). AOO: 4 km<sup>2</sup>. Number of locations: 1. IUCN category: CR B1ab(iii).

*Neuontobotrys polyphylla* is distributed in Argentina and Chile. Nevertheless, for Argentina only the type collection, from the Central Andean Puna of Catamarca province, is known. Therefore, it is presumed that one or more threat factors, such as habitat destruction, overgrazing, and global warming, may affect its presence.

***Onuris alismatifolia*** Gilg ex Skottsb.

Tribe: Eudemeae. Status: native (Argentina, Chile). EOO: 5002 km<sup>2</sup>. Number of locations: 8. IUCN category: VU B1ab(iii).

This species grows in southern Chile and Argentina (Santa Cruz and Tierra del Fuego provinces); along the Andean region within the Magellanic Subpolar forests. The reduced distribution range of this species in Argentina suggests its potential sensitivity to different threat factors that may affect its environment (e.g. habitat destruction, overgrazing, and climate change).

***Onuris hatcheriana*** (Gilg ex Macloskie) Gilg & Muschl.

Tribe: Eudemeae. Status: native (Argentina, Chile). EOO: 14416 km<sup>2</sup>. Number of locations: 5. IUCN category: VU B1ab(iii).

*Onuris hatcheriana* grows in Southern Argentina and Chile. In Argentina its distribution range is restricted to rocky outcrops in Santa Cruz province, within the Patagonian steppe and the Magellanic Subpolar forest ecoregions. Due to the scarcity of its populations and the reduced size of its distribution range, it is likely that different threat factors such as habitat destruction, overgrazing, and climate change, may affect its presence in the country.

***Pennellia brachycarpa*** Beilstein & Al-Shehbaz

Tribe: Halimolobeae. Status: endemic (Argentina). EOO: 1067 km<sup>2</sup>. Number of locations: 3. IUCN category: EN B1ab(iii).

*Pennellia brachycarpa* is an endemic species from the Central Andean Puna of Santa and Jujuy provinces. It is known only for a few collections. Therefore, the scarcity of its populations, and the restricted distribution range, suggest the species is potentially sensitive to different threat factors, such as habitat destruction, mining and global warming.

***Pennellia yalaensis*** Salariao & Al-Shehbaz

Tribe: Halimolobeae. Status: endemic (Argentina). AOO: 4 km<sup>2</sup>. Number of locations: 1. IUCN category: CR B1ab(iii).

*Pennellia yalaensis* is an Argentinean endemic restricted so far to the "Potrero de Yala" provincial reserve in the Southern Andean Yungas of Jujuy province. However, both due to the scarcity of its populations and the restricted distribution range, its presence is potentially sensitive to different threat factors such as habitat destruction, wide-scale felling of trees, overgrazing, and global warming.

***Petroravenia eseptata*** Al-Shehbaz

Tribe: Halimolobeae. Status: endemic (Argentina). EOO: 12 km<sup>2</sup>. Number of locations: 2. IUCN category: EN B1ab(iii).

*Petroravenia eseptata* is an endemic species restricted to Central Andean Puna of Salta and Jujuy. Although it has been collected recently, the species has a small distribution range and is represented by few populations, so it is highly sensitive to environmental alterations produced by different threat factors such as habitat destruction by mining, and global warming.

***Phlebolobium maclovianum*** (d'Urv.) O.E. Schulz

Tribe: Thelypodieae. Status: endemic (Argentina).  
EOO: 935 km<sup>2</sup>. Number of locations: 3. IUCN category: EN B1ab(iii).

This species, endemic to the Falkland Islands in the South Atlantic Ocean, has a reduced distribution range that can be affected by several threat factors such as overgrazing (sheep farming), agriculture, and climate change.

***Physaria crassistigma*** O'Kane & Al-Shehbaz

Tribe: Physarieae. Status: endemic (Argentina).  
EOO: 1806 km<sup>2</sup>. Number of locations: 5. IUCN category: EN B1ab(iii).

*Physaria crassistigma* is an endemic species restricted to northern Mendoza, where it inhabits the Andean highlands of the Southern Andean steppe and High Monte ecoregions. Although this species has been frequently collected, its reduced range suggests the potential sensitivity to different threat factors that modify its environment (e.g. habitat destruction, overgrazing and reduction of its ecological niche by global warming).

***Physaria okanensis*** Al-Shehbaz & Prina

Tribe: Physarieae. Status: endemic (Argentina).  
EOO: 1111 km<sup>2</sup>. Number of locations: 3. IUCN category: EN B1ab(iii).

*Physaria okanensis* is an endemic species restricted to highlands of Catamarca and Tucumán provinces, mainly along the Central Andean Puna. Due to the scarcity of collections, and its restricted distribution range, it is presumed that this species may be sensitive to different threat factors such as habitat destruction, mining, overgrazing, and global warming.

***Polypsecadium tucumanense*** (O.E. Schulz)

Al-Shehbaz

Tribe: Thelypodieae. Status: endemic (Argentina).  
EOO: 915 km<sup>2</sup>. Number of locations: 4. IUCN category: EN B1ab(iii).

This species is restricted to the province of Tucumán, where it grows in the transition zones of the Southern Andean Yungas and Central Andean

Puna ecoregions. The species is only known for a few collections, so the scarcity of its populations coupled with its restricted distribution suggest the susceptibility to different threat factors as habitat destruction, wide-scale felling of trees, overgrazing, and global warming.

***Rorippa clandestina*** (Spreng.) J.F. Macbr.

Tribe: Cardamineae. Status: native (Argentina, Bolivia, Brazil, Ecuador, Paraguay, Peru, Venezuela). AOO: 8 km<sup>2</sup>. Number of locations: 2. IUCN category: EN B1ab(iii).

This species grows in Argentina, Bolivia, Brazil, Ecuador, Paraguay, Peru and Venezuela; inhabiting muddy areas, slopes near rivers and humid valleys. So far, however, in Argentina only a few specimens have been found in Jujuy and Chaco provinces, therefore, it is presumed that one or more threat factors, such as habitat destruction, overgrazing, and global warming may affect its presence in the country.

***Sarcodraba dusenii*** (O.E. Schulz) Al-Shehbaz

Tribe: Thelypodieae. Status: native (Argentina, Chile). EOO: 496 km<sup>2</sup>. Number of locations: 3. IUCN category: EN B1ab(iii).

*Sarcodraba dusenii* grows in Southern Argentina and Chile. In Argentina its distribution range is restricted to mountain slopes of the Magellanic Subpolar forests in the Santa Cruz province. Due to the scarcity of its populations and the reduced size of its distribution range, it is presumable that different threat factors such as habitat destruction, overgrazing, and climate change, may affect its presence in the country.

***Sarcodraba subterranea*** O.E. Schulz

Tribe: Thelypodieae. Status: endemic (Argentina).  
AOO: 4 km<sup>2</sup>. Number of locations: 1. IUCN category: CR B1ab(iii).

*Sarcodraba subterranea* is an endemic species restricted to the southern Patagonian steppe in Santa Cruz province, and only known from a few collections. Due to the restricted distribution and scarce populations of this species, it is presumed that one or more threat factors may act (e.g. habitat destruction, overgrazing, and global warming).

***Sibara mendocina*** (Boelcke & S.C. Arroyo) Al-Shehbaz

Tribe: Thelypodieae. Status: endemic (Argentina). AOO: 4 km<sup>2</sup>. Number of locations: 1. IUCN category: CR B1ab(iii).

This endemic species of Argentina is restricted to the Mendoza province and so far, only known from the type locality (Quebrada Santa Elena, Uspallata, Las Heras department). It grows in extremely arid sites of the Andean Precordillera corresponding to the High Monte ecoregion. Due to the scarcity of its populations, and the restricted distribution range, its presence is potentially sensitive to different threat factors such as habitat destruction, and global warming.

***Stenodraba chillanensis*** (Phil.) O.E. Schulz

Tribe: Eudemeae. Status: native (Argentina, Chile). EOO: 1464 km<sup>2</sup>. Number of locations: 7. IUCN category: VU B1ab(iii).

*Stenodraba chillanensis* grows on rocky outcrops and slopes of Andean mountains in Argentina and Chile, within the Southern Andean steppe and Valdivian Temperate forests ecoregions. In Argentina this species is restricted to Mendoza and Neuquén provinces, and although it has been frequently collected, its reduced range suggests the potential vulnerability to different threat factors that modify its environment in the country (e.g. habitat destruction, overgrazing and reduction of its ecological niche by global warming).

***Stenodraba imbricatifolia*** (Barnéoud) O.E. Schulz

Tribe: Eudemeae. Status: native (Argentina, Chile). EOO: 8251 km<sup>2</sup>. Number of locations: 7. IUCN category: VU B1ab(iii).

*Stenodraba imbricatifolia* grows along the highlands of the Southern Andean steppe ecoregion in Argentina and Chile. In Argentina its distribution range is restricted to the Andes of San Juan province. Due to the scarcity of its populations and the reduced size of its distribution range, it is presumable that different threat factors such as habitat destruction, mining, overgrazing, and climate change, may affect its presence in the country.

***Stenodraba lechleri*** (E. Fourn.) Ravenna

Tribe: Eudemeae. Status: native (Argentina, Chile). EOO: 1573 km<sup>2</sup>. Number of locations: 5. IUCN category: EN B1ab(iii).

This species inhabits Andean slopes of southern Argentina and Chile, in the Valdivian Temperate forest ecoregion. In Argentina, *Stenodraba lechleri* is restricted to Neuquén and Río Negro provinces, and its reduced geographic range together with the scarcity of its population, suggests the potential sensitivity of this species to different threat factors that could modify its environment in the country (e.g. habitat destruction, overgrazing and reduction of its ecological niche by global warming).

***Trichotolinum deserticola*** (Speg.) O.E. Schulz

Tribe: Descuraineae. Status: endemic (Argentina). EOO: 8 km<sup>2</sup>. Number of locations: 2. IUCN category: EN B1ab(iii).

Endemic species of southern Argentina restricted to the Patagonian steppe in eastern Chubut and Santa Cruz provinces. So far, the species is only known from two collections more than 100 years old. If it is not found in the near future, it is likely that the species has become extinct. However, we preliminarily classify it here as threatened, since its distribution and scarcity of populations make it potentially sensitive to environmental alterations such as habitat destruction and global warming.

***Weberbaueria densifolia*** Al-Shehbaz

Tribe: Thelypodieae. Status: native (Argentina, Bolivia). EOO: 14641 km<sup>2</sup>. Number of locations: 3. IUCN category: VU B1ab(iii).

*Weberbaueria densifolia* inhabits highlands of the Central Andean Puna in Argentina and Bolivia. However, the species is known only from few collections. In Argentina, it has been found only in Jujuy and Catamarca provinces; therefore, given the scarcity of its populations it is presumed that one or more threat factors, such as habitat destruction, mining and global warming may affect its presence in the country.

***Weberbaueria herzogii*** (O.E. Schulz) Al-Shehbaz

Tribe: Thelypodieae. Status: native (Argentina,



Bolivia, Peru). EOO: 6601 km<sup>2</sup>. Number of locations: 6. IUCN category: VU B1ab(iii).

*Weberbaueria herzogii* inhabits the Puna highlands in northwestern Argentina, Bolivia and Southern Peru. In Argentina is restricted to Jujuy and Salta provinces, and although it has been frequently collected, its reduced geographic range suggests the potential vulnerability to different threat factors that could modify its environment in the country (e.g., habitat destruction, overgrazing and reduction of its ecological niche by global warming).

***Xerodraba colobanthoides*** Skottsbo.

Tribe: Eudemeae. Status: endemic (Argentina). EOO: 18594 km<sup>2</sup>. Number of locations: 5. IUCN category: VU B1ab(iii).

*Xerodraba colobanthoides* is endemic to the Patagonian steppe of Chubut province. The species is known from a few collections; this factor, together with its restricted distribution range, make it potentially vulnerable to alterations in the environment due to different threat factors, such as habitat destruction and reduction of its ecological niche by global warming.

***Xerodraba glebaria*** (Speg.) Skottsbo.

Tribe: Eudemeae. Status: endemic (Argentina). EOO: 807 km<sup>2</sup>. Number of locations: 3. IUCN category: EN B1ab(iii).

*Xerodraba glebaria*, species is only known for a few collections, is endemic to the Patagonian steppe of Chubut province. Its reduced distribution range, coupled with the scarcity of populations known, make this species potentially sensitive to alterations in the environment due to different threat factors, such as habitat destruction and reduction of its ecological niche by global warming.

***Xerodraba monantha*** (Gilg ex Kuntze) Skottsbo.

Tribe Eudemeae. Status: endemic (Argentina). AOO: 4 km<sup>2</sup>. Number of locations: 1. IUCN category: CR B1ab(iii).

*Xerodraba monantha* is restricted to the Patagonian steppe in southeastern Santa Cruz province. So far, the species is known only by the type collection (*Beaufils* 599, B) from the “Cañadon de las vacas – Cerro Observatorio” localities (Corpen Aike department), made more than 100 years ago. If it is not found in the next years, it is likely that the species has become extinct. However, we classify it here as threatened, since its distribution and scarcity of populations make it potentially sensitive to environmental alterations such as habitat destruction, mining and global warming.

***Yunkia subscandens*** (Kuntze) Salariaato & Al-Shehbaz

Tribe: Cremolobeae. Status: native (Argentina, Bolivia). EOO: 8 km<sup>2</sup>. Number of locations: 2. IUCN category: EN B1ab(iii).

*Yunkia subscandens* is distributed along the Yungas of Argentina and Bolivia. In Argentina it is only known for a few collections restricted to the Southern Andean Yungas of Salta and Jujuy. Its reduced distribution range in the country, coupled with the scarcity of populations, make this species potentially sensitive to different threat factors such as habitat destruction, wide-scale felling of trees, and global warming.

***Zuloagocardamum jujuyensis*** Salariaato & Al-Shehbaz

Tribe Thelypodieae. Status: endemic (Argentina). AOO: 4 km<sup>2</sup>. Number of locations: 1. IUCN category: CR B1ab(iii).

*Zuloagocardamum jujuyensis* is an endemic species restricted to the Central Andean Puna of Jujuy province, specifically from mountains of Sierra del Aguilar. As the populations of this species are very rare, and its distribution range is very restricted, the species is highly sensitive to environmental alterations produced by different threat factors such as habitat destruction by mining, and global warming.