Key access and utilization descriptors for *Lathyrus* spp. genetic resources

This list consists of an initial set of characterization and evaluation descriptors for *Lathyrus* utilization. This key set of strategic descriptors, together with passport data, will become the basis for the global accession-level information system being developed by the Bioversity-led project, Global Information on Germplasm Accessions (GIGA). It will facilitate access to and utilization of *Lathyrus* accessions held in genebanks, and does not preclude the addition of further descriptors, should data subsequently become available.

Based on the comprehensive list of 'Descriptors for *Lathyrus* spp.' (IPGRI, 2000), the set was developed in consultation with *Lathyrus* experts worldwide, and further refined by a Core Advisory Group (see 'Contributors') led by Dr Prem Mathur of Bioversity International.

Biotic and abiotic stresses included in the list were chosen because of their cosmopolitan nature, wide geographical occurrence and significant economic impact.

The numbers in parentheses on the right-hand side are the corresponding descriptor numbers as published in 'Descriptors for *Lathyrus* spp.' (IPGRI, 2000). Descriptors with numbers ending in 'X' are new descriptors that were added during the revision of the original publication.

Seedling vigour (7.1.3)

Recorded 20 days after emergence

3 Poor
5 Intermediate
7 Vigorous

Plant growth habit (7.1.6)

Recorded at the beginning of flowering period

1 Prostrate
2 Spreading
3 Semi-erect
4 Erect

Plant height [cm] (7.2.1)

Height of plant at physiological maturity measured from ground to the tip of the longest branch

Number of primary branches (7.3.2)

Counted at first pod maturity (only pod-bearing branches)

Days to 50% flowering [d] (7.6.2)

Number of days from sowing to stage when 50% of plants have begun to flower in a row

Days to maturity [d] (7.6.4)
From sowing to when 80% of plants have mature pods

Flower colour (7.6.12)
Score on fresh, open flowers for score standard, wing and keel colours separately

1 White
2 White blue
3 Blue
4 Grey
5 Light yellow
6 Yellow
7 Pink
8 Orange
9 Red
10 Violet–blue
11 Violet
99 Other (specify in descriptor **Notes**)

Pod-bearing position [cm] (7.6.19)
Recorded as height to the lowest pod

Number of pods per plant (7.7.2)
Mean number of pods. Recorded from randomly selected plants at physiological maturity.

Number of seeds per pod (7.7.16)
Mean number of seeds counted on randomly selected pods. Recorded at physiological maturity.

Pod dehiscence (7.7.17)
Scored one week after maturity

0 No shattering
3 Low shattering
5 Medium shattering
7 High shattering

Seed coat colour (7.8.3)

1 Greyed–white
2 Yellow–white
3 Grey
4 Brown
5 Yellow–green
6 Pink
7 Red–purple
8 Black
9 Grey mottled
10 Green mottled
99 Other (specify in descriptor **Notes**)

100-seed weight [g] (7.8.10)
Weight of 100 randomly selected mature seeds at 8–10% (air-dry) seed moisture content

Harvest index [%] (8.1.6)
Ratio of total grain to total biological yield taken from randomly selected plants in a row

Seed crude protein content [g/100 g DW] (8.2.1)

β-N-Oxalyl-L-α, β-Diaminopropionic Acid (ODAP) content [%] (8.2.4)
Estimate ODAP content in dry seeds and any other plant part (specify, such as dry cotyledons, dry embryo, etc.)

Susceptibility to Bean aphids (*Aphis craccivora*) (10.1.1)

Susceptibility to Pod borers (*Etiella zinckenella*) (10.1.2)

Susceptibility to Bruchids (*Bruchus* spp.) (10.1.4)

Susceptibility to Jassids (10.1.X)

Susceptibility to Powdery mildew (*Erysiphe polygoni* f.sp. *pisi*) (10.3.1)

Susceptibility to Downy mildew (*Peronospora lathyri-palustris*) (10.3.2)

Susceptibility to Broomrape (*Orobanche* spp.) (10.X.X)

Notes
Any additional information may be specified here, particularly that referring to the category 'Other' present in some of the descriptors above.

CONTRIBUTORS
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