

Project: Cichorieae, Created by www.identificationKey.fr

Options:

sddURL=http://www.infosyslab.fr/vibrant/project/test/Cichorieae-fullSDD.xml

fewStatesCharacterFirst=false

mergeCharacterStatesIfSameDiscrimination=false

pruning=false

verbosity=hs

scoreMethod=xper

weightContext=CostEffectiveness

weightType=global

parseDuration= 0.988s

keyCreationDuration= 0.918s

1 rosette leaves <indumentum> :

glabrous => 2  
pubescent => 3  
puberulous => 4  
floccose => *Crepis hookeriana* Ball  
woolly => 5  
scabridulous => *Crepis urundica* Bab.  
subglabrous => 6  
glabrescent => 7  
hispid => 8  
hispidulous => 9  
tomentose => 10  
hirsute => *Crepis vesicaria* L.  
glandular => 11  
pilose => *Crepis fraasii* Sch. Bip.

2 growth form <general> :

herb => 12  
rosette herb => 13

3 outer involucral bracts <shape> :

ovate => 14  
obovate => *Crepis achyrophoroides* Vatke  
linear => 15  
deltoid => *Crepis viscidula* Froel.  
linear-ovate => 16

4 corolla tube <indumentum> :

glabrous => *Crepis insignis* Bab.  
hispid => *Crepis alpina* L.  
pubescent => 17  
puberulous => 18  
strigose => *Crepis straussii* Bornm.

5 pappus <persistence> :

persistent => *Crepis lacera* Ten.  
caducous => 19

6 rosette leaves <incision> :

lyrate => *Crepis foetida* L.  
lyrate-pinnatisect => *Crepis fraasii* Sch. Bip.  
pinnatifid => 20  
runcinate => 21

7 outer involucral bracts <shape> :

ovate => 22  
oblong => *Crepis chrysantha* (Ledeb.) Turcz.  
linear => 23  
deltoid => 24  
linear-ovate => 25

**8** involucre <shape at (+ after) flowering> :

campanulate => 26

cylindrical => 27

turbinate => 28

cylindric-campanulate => 29

**9** growth form <lifetime> :

annual => 30

biennial => 31

perennial => 32

**10** involucre <shape at (+ after) flowering> :

campanulate => 33

cylindrical => 34

turbinate => *Crepis bakeri* Greene

cylindric-campanulate => 35

**11** outer involucral bracts <shape> :

ovate => 36

linear => 37

linear-ovate => 38

**12** involucre <shape at (+ after) flowering> :

campanulate => 39

cylindrical => 40

turbinate => 41

cylindric-campanulate => 42

**13** growth form <lifetime> :

annual => 43

biennial => 44

perennial => 45

**14** involucre <shape at (+ after) flowering> :

campanulate => 46

cylindrical => 47

cylindric-campanulate => 48

**15** pappus <persistence> :

persistent => 49

caducous => 50

**16** involucre <shape at (+ after) flowering> :

campanulate => 51

cylindrical => 52

cylindric-campanulate => 53

cylindric-turbinate => *Crepis apula* (Fiori) Babč.

**17** outer involucral bracts <shape> :

ovate => 54

linear => 55

linear-ovate => *Crepis aculeata* (DC.) Boiss.

**18** anthertube apical appendages <apex> :

acute => *Crepis schachtii* Babč.

obtuse => *Crepis baldaccii* subsp. *albanica* Jáv.

**19** anthertube apical appendages <apex> :

acute => *Crepis auriculifolia* Spreng.

acuminate => *Crepis leontodontoides* All.

**20** growth form <general> :

herb => *Crepis foetida* L.

rosette herb => *Hypochaeris glabra* L.

**21** pappus <persistence> :

persistent => *Crepis foetida* L.

caducous => *Crepis reuteriana* Boiss.

**22** cauline leaves <in outline> :

linear => 56  
elliptic-ovate => *Crepis barbiger*a Coville  
elliptic => 57  
oblong => *Crepis chrysantha* (Ledeb.) Turcz.  
ovate => 58  
obovate => 59  
linear-ovate => *Crepis auriculifolia* Spreng.  
oblong-ovate => *Crepis chrysantha* (Ledeb.) Turcz.

**23** flowering stems <branching rate> :

weakly branched => 60  
unbranched => *Crepis hookeriana* Ball  
branched => 61

**24** outer involuclral bracts <apex> :

acute => *Crepis viscidula* Froel.  
acuminate => *Crepis bakeri* Greene

**25** cauline leaves <in outline> :

linear => 62  
oblong => *Crepis aculeata* (DC.) Boiss.  
ovate => 63  
obovate => 64  
linear-ovate => *Crepis auriculifolia* Spreng.

**26** rosette leaves <incision> :

entire => *Crepis bithynica* Boiss.  
lyrate-pinnatisect => *Crepis fraasii* Sch. Bip.  
pinnatifid => 65  
pinnatisect => 66  
pinnatipartite => *Crepis oreades* Schrenk  
runcinate => *Crepis oreades* Schrenk

**27** pappus <persistence> :

persistent => 67  
caducous => *Crepis capillaris* (L.) Wallr.

**28** flowering stems <section> :

terete => *Crepis noronhaea* Babco.  
sulcate => *Crepis divaricata* (Lowe) F. W. Schultz  
striate => *Crepis capillaris* (L.) Wallr.

**29** outer involuclral bracts <shape> :

ovate => *Crepis divaricata* (Lowe) F. W. Schultz  
linear => *Crepis lacera* Ten.  
linear-ovate => *Crepis carbonaria* Sch. Bip.

**30** growth form <general> :

herb => 68  
rosette herb => 69

**31** anther tube apical appendages <apex> :

acute => *Crepis foetida* L.  
obtuse => *Crepis ciliata* K. Koch

**32** involucre <shape at (+ after) flowering> :

campanulate => 70  
cylindrical => 71  
cylindric-campanulate => *Crepis tingitana* Ball

**33** flowering stems <indumentum> :

pubescent => *Crepis chrysantha* (Ledeb.) Turcz.  
puberulous => *Crepis turcica* Degen & Bald.  
tomentose => 72  
glabrous => 73  
glabrescent => 74

scabridulous => *Crepis chrysantha* (Ledeb.) Turcz.  
glandular => 75  
woolly => *Crepis chrysantha* (Ledeb.) Turcz.  
hispid => 76

**34** rosette leaves <in outline> :

elliptic => *Crepis bakeri* Greene  
oblong => *Crepis aculeata* (DC.) Boiss.  
ovate => *Crepis aculeata* (DC.) Boiss.  
elliptic-ovate => *Crepis barbigera* Coville

**35** outer involucre bracts <shape> :

ovate => 77  
ovate-oblong => *Crepis tectorum* L.  
obovate => *Crepis tectorum* L.  
elliptic => *Crepis tectorum* L.  
oblong => *Crepis tectorum* L.  
linear => 78  
deltoid => *Crepis tectorum* L.  
triangular => *Crepis tectorum* L.  
triangular-ovate => 79  
linear-ovate => 80

**36** involucre <shape at (+ after) flowering> :

campanulate => 81  
cylindric-campanulate => 82  
cylindric-turbinate => *Crepis alpina* L.

**37** flowering stems <indumentum> :

pilose => *Crepis newii* Oliv. & Hiern subsp. *newii* - NUR TEIL (*Crepis bruceae* Bab.)  
pubescent => 83  
puberulous => *Crepis turcica* Degen & Bald.  
tomentose => 84  
floccose => *Crepis hookeriana* Ball  
glabrous => 85  
glabrescent => 86  
glandular => 87  
hispid => *Crepis urundica* Bab.

**38** involucre <shape at (+ after) flowering> :

campanulate => 88  
cylindric-campanulate => 89  
cylindric-turbinate => *Crepis apula* (Fiori) Bab.

**39** pappus <persistence> :

persistent => 90  
caducous => 91

**40** pappus <persistence> :

persistent => 92  
caducous => *Crepis patula* Poir.

**41** flowering stems <diameter (approx.)> :

slender => *Crepis noronhaea* Bab.  
robust => *Crepis divaricata* (Lowe) F. W. Schultz

**42** outer involucre bracts <shape> :

ovate => 93  
ovate-oblong => *Crepis tectorum* L.  
obovate => *Crepis tectorum* L.  
elliptic => *Crepis tectorum* L.  
oblong => *Crepis tectorum* L.  
linear => 94  
deltoid => *Crepis tectorum* L.  
triangular => *Crepis tectorum* L.  
triangular-ovate => 95  
linear-ovate => 96

**43** receptacle <paleate or not> :

with scales => *Crepis sancta* (L.) Bornm.

without scales => *Lactuca sativa* L.

naked => *Crepis capillaris* (L.) Wallr.

**44** achenes <apex> :

attenuate => *Crepis capillaris* (L.) Wallr.

with a filiform beak => *Lactuca sativa* L.

**45** corolla <indumentum> :

glabrous => *Lactuca tetrantha* B. L. Burtt & P. H. Davis

pubescent => *Crepis bursifolia* L.

woolly => *Sonchus bulbosus* (L.) N. Kilian & Greuter

**46** pappus <persistence> :

persistent => 97

caducous => 98

**47** pappus <colour> :

white => *Crepis atheniensis* Bab.

yellow => *Crepis napifera* (Franch.) Bab.

greyish => *Crepis erythraea* Pau

**48** anther tube apical appendages <apex> :

acute => 99

obtuse => *Crepis ruppellii* Sch.Bip.

acuminate => 100

**49** achenes <apex> :

attenuate => 101

attenuate into an ill-defined beak => 102

with a filiform beak => 103

**50** style branches <colour> :

yellow => 104

green => *Crepis muhlenbergii* Bab.

greenish => *Crepis bursifolia* L.

**51** achenes <colour> :

brown => 105

brownish-yellow => *Crepis clausonii* (Pomel) Pomel

stramineous => *Crepis auriculifolia* Spreng.

orange-red => *Crepis auriculifolia* Spreng.

reddish => *Crepis oreades* Schrenk

**52** pappus <persistence> :

persistent => *Crepis lampsanoides* (Gouan) Tausch

caducous => *Crepis patula* Poir.

**53** anther tube apical appendages <apex> :

acute => 106

acuminate => 107

truncate => *Crepis robertioides* Boiss.

**54** growth form <lifetime> :

annual => 108

perennial => 109

**55** pappus <persistence> :

persistent => 110

caducous => *Crepis filiformis* Viv.

**56** rosette leaves <margin> :

entire => *Crepis amplexifolia* (Godr.) Willk.

ciliate => *Crepis amplexifolia* (Godr.) Willk.

sinuate-dentate => *Crepis oreades* Schrenk

dentate => 111

denticulate => *Crepis amplexifolia* (Godr.) Willk.

**57** outer involucral bracts <apex> :

**acute** => *Crepis viscidula* Froel.

**acuminate** => *Crepis bakeri* Greene

**58** pappus <persistence> :

**persistent** => 112

**caducous** => *Crepis amplexifolia* (Godr.) Willk.

**59** achenes <surface structure> :

**muricate** => 113

**smooth** => *Crepis viscidula* Froel.

**60** achenes <surface structure> :

**muricate** => *Crepis dens-leonis* K. Koch

**smooth** => *Crepis viscidula* Froel.

**61** pappus <texture> :

**fragile** => *Crepis athoa* Boiss.

**flexible** => *Crepis nigricans* Viv.

**62** rosette leaves <margin> :

**sinuate-dentate** => *Crepis oreades* Schrenk

**denticulate** => *Crepis carbonaria* Sch. Bip.

**63** involucre <shape at (+ after) flowering> :

**campanulate** => *Crepis oreades* Schrenk

**cylindrical** => *Crepis aculeata* (DC.) Boiss.

**cylindric-campanulate** => *Crepis carbonaria* Sch. Bip.

**64** anther tube apical appendages <apex> :

**acute** => *Crepis bungei* Froel.

**acuminate** => *Crepis juvenalis* (Delile) F. W. Schultz

**65** flowering stems <section> :

**terete** => *Crepis heterotricha* Froel.

**striate** => *Crepis bithynica* Boiss.

**66** pappus <persistence> :

**persistent** => *Crepis willdenowii* Czerep.

**caducous** => *Crepis amanica* Bab.

**67** achenes <apex> :

**attenuate** => *Crepis barbiger* Coville

**with a stout beak** => *Crepis noronhaea* Bab.

**68** pappus <colour> :

**white** => 114

**brownish** => *Hypochaeris achyrophorus* L.

**69** flowering stems <indumentum> :

**arachnoid** => *Picris pauciflora* Willd.

**hispidulous** => *Picris pauciflora* Willd.

**glabrous** => *Hypochaeris glabra* L.

**subglabrous** => *Crepis sancta* (L.) Bornm.

**glandular** => *Crepis sancta* (L.) Bornm.

**hispid** => *Picris rhagadioloides* (L.) Desf.

**70** growth form <general> :

**herb** => 115

**rosette herb** => *Leontodon tuberosus* L.

**71** pappus <persistence> :

**persistent** => 116

**caducous** => *Crepis reuteriana* Boiss.

**72** growth form <lifetime> :

**annual** => *Crepis insignis* Bab.

perennial => 117

73 pappus <texture> :

fragile => *Crepis athoa* Boiss.

flexible => *Crepis chrysantha* (Ledeb.) Turcz.

74 outer involucre bracts <shape> :

ovate => *Crepis alpestris* (Jacq.) Tausch

linear-ovate => *Crepis bungei* Froel.

75 rosette leaves <in outline> :

oblong => *Crepis chrysantha* (Ledeb.) Turcz.

ovate => *Crepis arcuata* Kamari & Strid

obovate => 118

oblong-obovate => *Crepis alikeri* Czerep.

76 corolla <colour> :

yellow => *Crepis willdenowii* Czerep.

pink => *Crepis alikeri* Czerep.

77 inner involucre bracts <apex> :

acute => *Crepis leontodontoides* All.

obtuse => *Crepis rueppellii* Sch.Bip.

acuminate => *Crepis tectorum* L.

78 pappus <persistence> :

persistent => *Crepis lacera* Ten.

caducous => *Crepis tectorum* L.

79 pappus <persistence> :

persistent => 119

caducous => *Crepis tectorum* L.

80 anthertube apical appendages <apex> :

obtuse => *Crepis tectorum* L.

acuminate => 120

truncate => *Crepis robertioides* Boiss.

81 inner involucre bracts <shape> :

ovate => 121

ovate-oblong => 122

82 anthertube apical appendages <apex> :

acute => *Crepis auriculifolia* Spreng.

obtuse => *Crepis rueppellii* Sch.Bip.

83 involucre <shape at (+ after) flowering> :

campanulate => 123

cylindric-campanulate => *Crepis faureliana* Maire

84 receptacle <surface> :

alveolate => 124

areolate => 125

shortly ciliate => 126

85 pappus <persistence> :

persistent => *Crepis oporinoides* Froel.

caducous => *Crepis connexa* Bab.

86 flowering stems <branching rate> :

weakly branched => *Crepis subscaposa* Collett & Hemsl.

unbranched => *Crepis hookeriana* Ball

87 involucre <shape at (+ after) flowering> :

campanulate => 127

cylindric-campanulate => *Crepis faureliana* Maire

88 pappus <persistence> :



**persistent** => 128  
**caducous** => *Crepis auriculifolia* Spreng.

**89** pappus <persistence> :  
**persistent** => 129  
**caducous** => *Crepis auriculifolia* Spreng.

**90** outer involucre bracts <apex> :  
**acute** => *Crepis viscidula* Froel.  
**acuminate** => 130  
**obtuse** => *Crepis aurea* (L.) Cass.

**91** outer involucre bracts <shape> :  
**ovate** => 131  
**obovate** => *Crepis achyrophoroides* Vatke  
**linear** => 132  
**linear-ovate** => 133

**92** achenes <colour> :  
**brown** => *Crepis noronhaea* Bab. & C.  
**stramineous** => *Crepis demavendi* Bornm.

**93** inner involucre bracts <apex> :  
**acute** => 134  
**obtuse** => 135  
**acuminate** => 136

**94** inner involucre bracts <apex> :  
**acute** => *Crepis arenaria* (Pomel) Pomel  
**obtuse** => 137  
**acuminate** => *Crepis tectorum* L.

**95** pappus <persistence> :  
**persistent** => *Crepis atribarba* A. Heller  
**caducous** => *Crepis tectorum* L.

**96** anther tube apical appendages <apex> :  
**acute** => 138  
**obtuse** => *Crepis tectorum* L.  
**acuminate** => 139  
**truncate** => *Crepis robertioides* Boiss.

**97** achenes <colour> :  
**brown** => 140  
**brownish-yellow** => 141  
**greenish-yellow** => *Crepis bithynica* Boiss.  
**reddish** => *Crepis oreades* Schrenk

**98** achenes <apex> :  
**attenuate** => *Crepis auriculifolia* Spreng.  
**attenuate into an ill-defined beak** => *Crepis salzmannii* Bab. & C.  
**with a filiform beak** => *Crepis achyrophoroides* Vatke

**99** pappus <persistence> :  
**persistent** => *Crepis rubra* L.  
**caducous** => *Crepis auriculifolia* Spreng.

**100** achenes <colour> :  
**brown** => 142  
**stramineous** => *Crepis elbrusensis* Boiss.  
**yellowish** => *Crepis leontodontoides* All.

**101** pappus <colour> :  
**white** => 143  
**whitish** => *Crepis subscaposa* Collett & Hemsl.  
**yellow** => *Crepis subscaposa* Collett & Hemsl.  
**yellowish** => *Crepis oporinoides* Froel.



**102** pappus <texture> :

**fragile** => *Crepis xylorrhiza* Sch. Bip.

**flexible** => *Crepis newii* Oliv. & Hiern subsp. *newii* - NUR TEIL (*Crepis bruceae* Bab.)

**103** anther tube apical appendages <apex> :

**acute** => *Crepis gossweileri* S. Moore

**obtuse** => *Crepis triasii* (Cambess.) Nyman

**104** involucre <shape at (+ after) flowering> :

**campanulate** => 144

**cylindrical** => *Crepis patula* Poir.

**cylindric-campanulate** => 145

**105** pappus <persistence> :

**persistent** => 146

**caducous** => *Crepis auriculifolia* Spreng.

**106** pappus <persistence> :

**persistent** => *Crepis elymaitica* Bornm.

**caducous** => *Crepis auriculifolia* Spreng.

**107** cauline leaves <base> :

**amplexicaul** => *Crepis willemetii* Boiss.

**petiole-like attenuate** => *Crepis leontodontoides* All.

**cordate** => *Crepis willemetii* Boiss.

**108** pappus <persistence> :

**persistent** => *Crepis alpina* L.

**caducous** => *Crepis amplexifolia* (Godr.) Willk.

**109** flowering stems <branching rate> :

**weakly branched** => *Crepis chondrilloides* Jacq.

**branched** => *Crepis libyca* (Pamp.) Bab.

**110** growth form <lifetime> :

**annual** => *Crepis nigricans* Viv.

**perennial** => *Crepis chondrilloides* Jacq.

**111** flowering stems <colour> :

**tinged purple** => *Crepis erythraea* Pau

**purple** => *Crepis bakeri* Greene

**112** achenes <colour> :

**brown** => 147

**reddish** => *Crepis oreades* Schrenk

**113** anther tube apical appendages <apex> :

**acute** => *Crepis alpestris* (Jacq.) Tausch

**acuminate** => *Crepis chrysantha* (Ledeb.) Turcz.

**114** inner involucre bracts <indumentum> :

**glabrous** => *Crepis neglecta* subsp. *corymbosa* (Ten.) Nyman

**hispid** => *Crepis suffreniana* (DC.) J. Lloyd

**pubescent** => *Crepis foetida* L.

**tomentose** => *Crepis suffreniana* (DC.) J. Lloyd

**115** pappus <persistence> :

**persistent** => 148

**caducous** => *Crepis reuteriana* Boiss.

**116** anther tube apical appendages <apex> :

**acute** => *Crepis foetida* L.

**acuminate** => *Crepis elongata* Bab.

**117** flowering stems <posture> :

**erect** => 149

**ascending** => 150

**118** anthertube apical appendages <apex> :

- acute** => *Crepis alpestris* (Jacq.) Tausch
- acuminate** => *Crepis chrysantha* (Ledeb.) Turcz.

**119** cauline leaves <in outline> :

- linear** => *Crepis atribarba* A. Heller
- elliptic-ovate** => *Crepis acuminata* Nutt.
- ovate** => *Crepis atribarba* A. Heller

**120** pappus <persistence> :

- persistent** => *Crepis juvenalis* (Delile) F. W. Schultz
- caducous** => *Crepis leontodontoides* All.

**121** inner involucral bracts <apex> :

- acute** => 151
- obtuse** => 152
- acuminate** => 153

**122** receptacle <surface> :

- areolate** => *Crepis oreades* Schrenk
- shortly ciliate** => *Crepis arcuata* Kamari & Strid

**123** flowering stems <solidity> :

- hollow** => *Crepis newii* Oliv. & Hiern subsp. *newii* - NUR TEIL (*Crepis bruceae* Babc.)
- medullary** => *Crepis subscaposa* Collett & Hemsl.

**124** pappus <persistence> :

- persistent** => *Crepis faureliana* Maire
- caducous** => *Crepis turcica* Degen & Bald.

**125** inner involucral bracts <apex> :

- acute** => *Crepis urundica* Babc.
- obtuse** => *Crepis subscaposa* Collett & Hemsl.

**126** inner involucral bracts <shape> :

- ovate** => 154
- ovate-oblong** => *Crepis arcuata* Kamari & Strid

**127** inner involucral bracts <shape> :

- ovate** => 155
- ovate-oblong** => *Crepis arcuata* Kamari & Strid

**128** achenes <colour> :

- brown** => *Crepis baldaccii* Halácsy
- reddish** => *Crepis oreades* Schrenk

**129** achenes <apex> :

- attenuate** => *Crepis robertioides* Boiss.
- with a filiform beak** => *Crepis elymaitica* Bornm.

**130** anthertube apical appendages <apex> :

- acute** => *Crepis chondrilloides* Jacq.
- obtuse** => *Crepis baldaccii* subsp. *albanica* Jáv.

**131** pappus <texture> :

- fragile** => *Crepis bupleurifolia* (Boiss. & Kotschy) Freyn & Sint.
- flexible** => 156

**132** pappus <colour> :

- white** => *Crepis filiformis* Viv.
- whitish** => *Crepis canariensis* (Sch. Bip.) Babc.

**133** achenes <apex> :

- attenuate** => *Crepis auriculifolia* Spreng.
- with a filiform beak** => *Crepis clausonis* (Pomel) Pomel

**134** achenes <apex> :

- attenuate** => 157

attenuate into an ill-defined beak => *Crepis leontodontoides* All.  
with a filiform beak => *Crepis libyca* (Pamp.) Babč.  
with a stout beak => *Crepis divaricata* (Lowe) F. W. Schultz

**135** pappus <persistence> :

persistent => *Crepis tingitana* Ball  
caducous => 158

**136** anther tube apical appendages <apex> :

acute => *Crepis auriculifolia* Spreng.  
obtuse => *Crepis tectorum* L.  
acuminate => *Crepis willemetii* Boiss.

**137** pappus <colour> :

white => *Crepis bellidifolia* Loisel.  
orange-brown => *Crepis tybakiensis* Vierh.  
yellowish => *Crepis oporinoides* Froel.

**138** achenes <apex> :

attenuate => *Crepis auriculifolia* Spreng.  
attenuate into an ill-defined beak => *Crepis carbonaria* Sch. Bip.

**139** inner involucre bracts <apex> :

acute => 159  
obtuse => *Crepis carbonaria* Sch. Bip.  
acuminate => *Crepis willemetii* Boiss.

**140** corolla <colour> :

yellow => 160  
white => *Crepis dioritica* Boiss.

**141** anther tube apical appendages <apex> :

acute => *Crepis dioritica* Boiss.  
truncate => *Crepis pyrenaica* (L.) Greuter

**142** cauline leaves <base> :

amplexicaul => *Crepis willemetii* Boiss.  
petiole-like attenuate => *Crepis leontodontoides* All.  
cordate => *Crepis willemetii* Boiss.

**143** achenes <colour> :

brown => 161  
brownish-yellow => *Crepis faureliana* Maire

**144** flowering branches <posture> :

ascending => *Crepis connexa* Babč.  
remote => *Crepis turcica* Degen & Bald.

**145** inner involucre bracts <apex> :

acute => *Crepis arenaria* (Pomel) Pomel  
obtuse => *Crepis bellidifolia* Loisel.

**146** achenes <shape> :

cylindrical => *Crepis lampsanoides* (Gouan) Tausch  
fusiform => *Crepis baldaccii* Halácsy

**147** achenes <surface structure> :

muricate => *Crepis alpestris* (Jacq.) Tausch  
smooth => *Crepis viscidula* Froel.

**148** inner involucre bracts <apex> :

subacute => *Crepis foetida* L.  
acuminate => *Crepis armena* Froel.

**149** achenes <colour> :

brown => 162  
black => *Crepis willdenowii* Czerep.  
yellow => *Crepis bungei* Froel.

reddish => 163

**150** receptacle <surface> :

areolate => *Crepis oreades* Schrenk

shortly ciliate => *Crepis arcuata* Kamari & Strid

**151** pappus <persistence> :

persistent => 164

caducous => *Crepis auriculifolia* Spreng.

**152** achenes <colour> :

brown => *Crepis alpestris* (Jacq.) Tausch

reddish => *Crepis oreades* Schrenk

**153** pappus <persistence> :

persistent => 165

caducous => *Crepis auriculifolia* Spreng.

**154** pappus <persistence> :

persistent => *Crepis faureliana* Maire

caducous => *Crepis turcica* Degen & Bald.

**155** cauline leaves <apex> :

acute => *Crepis newii* Oliv. & Hiern subsp. *newii* - NUR TEIL (*Crepis bruceae* Babc.)

acuminate => *Crepis subscaposa* Collett & Hemsl.

obtuse => *Crepis urundica* Babc.

**156** flowering stems <diameter (approx.)> :

slender => *Crepis auriculifolia* Spreng.

robust => *Crepis achyrophoroides* Vatke

**157** anther tube apical appendages <apex> :

acute => *Crepis auriculifolia* Spreng.

acuminate => 166

**158** outer involucral bracts <apex> :

acute => *Crepis rueppellii* Sch.Bip.

subacute => *Crepis vesicaria* L.

**159** cauline leaves <base> :

amplexicaul => *Crepis willemetii* Boiss.

petiole-like attenuate => *Crepis leontodontoides* All.

cordate => *Crepis willemetii* Boiss.

**160** outer involucral bracts <apex> :

acute => 167

acuminate => *Crepis baldaccii* Halácsy

**161** achenes <surface structure> :

muricate => *Crepis hookeriana* Ball

smooth => *Crepis viscidula* Froel.

**162** inner involucral bracts <apex> :

acute => *Crepis turcica* Degen & Bald.

obtuse => 168

acuminate => *Crepis pantocsekii* (Vis.) Latzel

**163** corolla tube <indumentum> :

glabrous => *Crepis bungei* Froel.

pubescent => *Crepis oreades* Schrenk

scabridulous => *Crepis bungei* Froel.

**164** corolla <colour> :

yellow => 169

white => *Crepis dioritica* Boiss.

**165** corolla tube <indumentum> :

pubescent => 170

puberulous => *Crepis schachtii* Babc.

166 cauline leaves <base> :

amplexicaul => *Crepis willemetioides* Boiss.

petiole-like attenuate => *Crepis leontodontoides* All.

cordate => *Crepis willemetioides* Boiss.

167 achenes <apex> :

attenuate => 171

attenuate into an ill-defined beak => *Crepis alpestris* (Jacq.) Tausch

with a filiform beak => *Crepis newii* subsp. *oliveriana* (Kuntze) C. Jeffrey & Beentje

168 outer involucral bracts <shape> :

ovate => *Crepis alpestris* (Jacq.) Tausch

linear-ovate => *Crepis bungei* Froel.

169 outer involucral bracts <apex> :

acute => 172

acuminate => *Crepis baldaccii* Halácsy

170 corolla <colour> :

yellow => 173

white => *Crepis dioritica* Boiss.

171 achenes <compression> :

compressed => 174

straight => *Crepis bithynica* Boiss.

dorsoventrally compressed => *Crepis bithynica* Boiss.

172 corolla tube <indumentum> :

pubescent => 175

puberulous => *Crepis schachtii* Babc.

173 outer involucral bracts <apex> :

acute => *Crepis armena* Froel.

acuminate => *Crepis baldaccii* Halácsy

obtuse => *Crepis armena* Froel.

174 achenes <surface structure> :

muricate => *Crepis alpestris* (Jacq.) Tausch

smooth => *Crepis viscidula* Froel.

175 achenes <epidermis/indumentum> :

glabrous => *Crepis bithynica* Boiss.

pilose => *Crepis oreades* Schrenk

## STATISTICS

Taxon	Number of paths leading to taxon	Length of the shortest path leading to taxon	Average length of paths leading to taxon	Length of the longest path leading to taxon
<i>Lactuca tetrantha</i> B. L. Burt & P. H. Davis	7	4	4.0	4
<i>Lactuca viminea</i> (L.) J. Presl & C. Presl	0	0	0.0	0
<i>Lactuca triquetra</i> (Labill.) Boiss.	0	0	0.0	0
<i>Crepis pulchra</i> L.	0	0	0.0	0
<i>Chondrilla juncea</i> L.	0	0	0.0	0
<i>Crepis paludosa</i> (L.) Moench	0	0	0.0	0
<i>Lactuca serriola</i> L.	0	0	0.0	0

Sonchus bulbosus (L.) N. Kilian & Greuter	7	4	4.0	4
Lactuca cyprica (Rech. f.) N. Kilian & Greuter	0	0	0.0	0
Cichorium endivia L.	0	0	0.0	0
Cichorium intybus L.	0	0	0.0	0
Cichorium spinosum L.	0	0	0.0	0
Crepis aspera L.	0	0	0.0	0
Crepis foetida L.	49	2	3.857	6
Crepis fraasii Sch. Bip.	21	1	2.0	3
Crepis micrantha Czerep.	0	0	0.0	0
Crepis palaestina (Boiss.) Bornm.	0	0	0.0	0
Crepis reuteriana Boiss.	21	3	4.0	5
Crepis sancta (L.) Bornm.	21	4	4.0	4
Crepis zacintha (L.) Loisel.	0	0	0.0	0
Geropogon hybridus (L.) Sch. Bip.	0	0	0.0	0
Helminthotheca echioides (L.) Holub	0	0	0.0	0
Hypochaeris achyrophorus L.	7	4	4.0	4
Hypochaeris glabra L.	14	3	3.5	4
Lactuca saligna L.	0	0	0.0	0
Launaea fragilis (Asso) Pau	0	0	0.0	0
Leontodon tuberosus L.	7	4	4.0	4
Picris rhagadioloides (L.) Desf.	7	4	4.0	4
Picris cyprica Lack	0	0	0.0	0
Picris pauciflora Willd.	14	4	4.0	4
Scolymus hispanicus L.	0	0	0.0	0
Scolymus maculatus L.	0	0	0.0	0
Scorzonera troodea Boiss.	0	0	0.0	0
Sonchus asper (L.) Hill	0	0	0.0	0
Sonchus oleraceus L.	0	0	0.0	0
Sonchus tenerrimus L.	0	0	0.0	0
Lactuca tuberosa Jacq.	0	0	0.0	0
Tolpis virgata (Desf.) Bertol.	0	0	0.0	0
Podospermum canum C. A. Mey.	0	0	0.0	0
Tolpis barbata (L.) Gaertn.	0	0	0.0	0
Tragopogon porrifolius L.	0	0	0.0	0
Urospermum picroides (L.) F. W. Schmidt	0	0	0.0	0
Crepis tectorum L.	140	3	3.95	6

Crepis biennis L.	0	0	0.0	0
Crepis capillaris (L.) Wallr.	28	3	3.5	4
Crepis nicaeensis Pers.	0	0	0.0	0
Crepis rubra L.	7	5	5.0	5
Crepis setosa Haller f.	0	0	0.0	0
Crepis vesicaria L.	14	1	4.0	7
Crepis bursifolia L.	14	4	4.0	4
Lactuca sativa L.	14	4	4.0	4
Askellia pygmaea (Ledeb.) Sennikov	0	0	0.0	0
Askellia elegans (Hook.) W. A. Weber	0	0	0.0	0
Crepis rueppellii Sch.Bip.	28	4	4.75	7
Crepis baldaccii subsp. albanica Jáv.	14	3	4.5	6
Crepis albida Vill.	0	0	0.0	0
Crepis dioritica Boiss.	28	6	6.75	8
Crepis amplexifolia (Godr.) Willk.	35	4	4.2	5
Crepis apula (Fiori) Babç.	14	3	3.0	3
Crepis atheniensis Babç.	7	4	4.0	4
Crepis auriculifolia Spreng.	133	3	4.895	7
Crepis balliana Babç.	0	0	0.0	0
Crepis bellidifolia Loisel.	14	6	6.0	6
Crepis bertiscea Jáv.	0	0	0.0	0
Crepis pyrenaica (L.) Greuter	7	6	6.0	6
Crepis bodinieri H. Lév.	0	0	0.0	0
Crepis erythia Pau	14	4	4.5	5
Crepis newii Oliv. & Hiern subsp. newii - NUR TEIL (Crepis bruceae Babç.)	28	3	4.75	6
Crepis canariensis (Sch. Bip.) Babç.	7	6	6.0	6
Crepis chloroclada Colett & Hemsl.	0	0	0.0	0
Crepis claryi Batt.	0	0	0.0	0
Crepis newii subsp. oliveriana (Kuntze) C. Jeffrey & Beentje	7	8	8.0	8
Crepis chondrilloides Jacq.	21	5	5.333	6
Crepis clausonis (Pomel) Pomel	14	4	5.0	6
Crepis connexa Babç.	14	4	5.0	6
Crepis neglecta subsp. corymbosa (Ten.) Nyman	7	5	5.0	5
Crepis demavendi Bornm.	7	5	5.0	5
Crepis oreades Schrenk	98	3	5.071	10



Crepis dens-leonis K. Koch	7	4	4.0	4
Crepis divaricata (Lowe) F. W. Schultz	28	3	4.0	6
Crepis elbrusensis Boiss.	7	5	5.0	5
Crepis elongata Babc.	7	5	5.0	5
Crepis elymaitica Bornm.	14	5	5.0	5
Crepis faureliana Maire	35	4	5.0	6
Crepis filiformis Viv.	14	4	5.0	6
Crepis gossweileri S. Moore	7	5	5.0	5
Crepis heterotricha Froel.	7	4	4.0	4
Crepis hookeriana Ball	35	1	3.6	7
Crepis insignis Babc.	14	2	3.0	4
Crepis juvenalis (Delile) F. W. Schultz	14	4	4.5	5
Crepis lampsanoides (Gouan) Tausch	14	4	5.0	6
Crepis lacera Ten.	21	2	3.0	4
Crepis leontodontoides All.	63	3	5.444	8
Crepis libyca (Pamp.) Babc.	14	5	5.5	6
Crepis lignea (Vaniot) Babc.	0	0	0.0	0
Crepis muhlisii Babc.	7	4	4.0	4
Crepis napifera (Franch.) Babc.	7	4	4.0	4
Crepis nigricans Viv.	14	4	4.5	5
Crepis noronhaea Babc.	28	3	4.0	5
Crepis oporinoides Froel.	21	4	5.0	6
Crepis pantocsekii (Vis.) Latzel	7	7	7.0	7
Crepis patula Poir.	21	4	4.333	5
Crepis phoenix Dunn ##fehlt noch	0	0	0.0	0
Crepis robertioides Boiss.	28	4	4.5	5
Crepis rigescens Diels	0	0	0.0	0
Crepis salzmännii Babc.	7	5	5.0	5
Crepis schachtii Babc.	21	3	6.333	9
Crepis straussii Bornm.	7	2	2.0	2
Crepis subscaposa Collett & Hemsl.	42	4	5.0	6
Crepis suffreniana (DC.) J. Lloyd	14	5	5.0	5
Crepis tingitana Ball	14	3	4.5	6
Crepis triasii (Cambess.) Nyman	7	5	5.0	5

Crepis turcomanica Krasch.	0	0	0.0	0
Crepis tybakiensis Vierh.	7	6	6.0	6
Crepis urundica Babc.	28	1	3.75	6
Crepis viscidula Froel.	63	2	5.0	10
Crepis willdenowii Czerep.	21	4	4.667	6
Crepis willemetioides Boiss.	70	5	6.4	8
Crepis xylorrhiza Sch. Bip.	7	5	5.0	5
Crepis turcica Degen & Bald.	42	3	5.0	7
Crepis achyrophoroides Vatke	28	2	4.75	7
Crepis aculeata (DC.) Boiss.	35	3	3.2	4
Crepis acuminata Nutt.	7	5	5.0	5
Crepis alikeri Czerep.	14	4	4.0	4
Crepis alpestris (Jacq.) Tausch	56	4	6.5	10
Crepis alpina L.	21	2	3.333	5
Crepis amanica Babc.	7	4	4.0	4
Crepis arcuata Kamari & Strid	35	4	5.0	6
Crepis arenaria (Pomel) Pomel	14	5	5.5	6
Crepis armena Froel.	21	6	8.0	9
Crepis athoa Boiss.	14	4	4.0	4
Crepis atribarba A. Heller	21	5	5.0	5
Crepis aurea (L.) Cass.	7	5	5.0	5
Crepis bakeri Greene	35	2	3.4	5
Crepis baldaccii Halácsy	35	5	7.0	9
Crepis barbigeri Coville	21	3	3.333	4
Crepis bithynica Boiss.	42	3	6.667	10
Crepis bungei Froel.	42	4	6.0	8
Crepis bupleurifolia (Boiss. & Kotschy) Freyn & Sint.	7	6	6.0	6
Crepis carbonaria Sch. Bip.	35	3	4.6	6
Crepis caucasica C. A. Mey.	0	0	0.0	0
Crepis caucasigena Czerep.	0	0	0.0	0
Crepis chrysantha (Ledeb.) Turcz.	70	2	3.5	5
Crepis ciliata K. Koch	7	3	3.0	3
AVERAGE	23.406	3.896	4.67	5.563