

97. 全裂翠雀花 图版 46: 1-3

Delphinium trisectum W. T. Wang in Acta Bot. Sin. 10(1): 80. 1962; Munz in J. Arn. Arb. 48(4): 539. 1967; S. H. Fu, Fl. Hupeh. 1: 338, fig. 469. 1976; W. T. Wang in Fl. Reip. Pop. Sin. 27: 389, pl. 88: 1-3. 1979; B. Z. Ding, Fl. Henan 1: 435, fig. 551. 1981; X. W. Wang in Fl. Anhui 2: 304. 1987; Z. Wang & W. T. Wang in High. Pl. China 3: 437, fig. 692. 2000; W. T. Wang & M. J. Warnock in Fl. China 6: 246. 2001; W. T. Wang in High. Pl. China in Colour 3: 366. 2016. Type 河南: 商城, 里罗城, alt. 400 m, 1959-04-19, 河南队 149 (holotype, PE); 商城, 景岗台, 子盆沟, alt. 840 m, 1959-04-17, 河南队 64 (paratype, PE)。

草本高 45~50 cm。茎被反曲短柔毛, 不分枝或有 1 分枝。最下部叶在花期枯萎, 其他下部茎生叶有长柄; 叶片肾状五角形, (2.8~)4.5~6.8 × (5.2)7.5~12 cm, 3 全裂, 中央全裂片菱形, 3 深裂, 2 回深裂片又深裂, 末回裂片卵形至狭三角形, 侧全裂片较大, 斜扇形, 不等 2 深裂, 两面疏被短毛; 叶柄长达 17 cm。总状花序顶生, 有 (5~)10~14 花; 下部苞片叶状, 其他苞片条形; 轴和花梗密被短柔毛; 花梗长 2~7.5 cm, 上部具条形或钻形小苞片。萼片蓝紫色, 卵形或狭倒卵形, 长 14~17 mm, 距钻形, 长 16~21 mm。花瓣无毛。退化雄蕊黑褐色; 瓣片 2 浅裂, 腹面有淡黄色髯毛。雄蕊无毛。心皮 3, 子房被短柔毛。4 月—5 月开花。

分布与系的分布相同。生于山坡草地、溪边、林缘或林中, 海拔 350~840 m。

标本登录 湖北: 随州, 植物资源队 D01546; 大悟山, 祝耀清 63; 麻城, 湖北药检所 54。河南: 信阳, 植物资源队 D013; 鸡公山, 中德

队 911; 罗山, 植物资源队 D0133, 杨亲二和袁琼 384; 新县, 植物资源队 D0176; 商城, 植物资源队 D058。安徽: 金寨, 王德群等 5621; 铜陵, 高金川 s. n.; 石台, 赵鑫磊 2016-014。

组 3. 翠雀花组

Sect. **Delphinastrum** DC. Syst. 1: 351. 1818; et Prodr. 1: 53. 1824; W. T. Wang in Acta Bot. Sin. 10(1): 155. 1962; Tamura in Sei. Rep. Osaka Univ. 15: 33. 1966; et in Hiepko, Nat. Pflanzenfam., Zwei. Aufl., 17aIV: 299. 1995; W. T. Wang & M. J. Warnock in Fl. China 6: 246. 2001. Lectotype: *Delphinium grandiflorum* L. (Wang, 1962).

Sect. *Schizopetala* Huth in Bull. Herb. Boiss. 1: 333. 1893.

Sect. *Diedropetala* Huth in Bot. Jahrb. 20: 420. 1895. — Gen. *Diedropetala* (Huth) Galushko in Novost. Syst. Pl. Vasc. 15: 251. 1976.

Sect. *Kalobopetala* Huth in l. c. 458

Sect. *Homochroë* Bruhl in Ann. Bot. Gard. Calc. 5: 91. 1896.

Sect. *Isocheilae* Bruhl in l. c., p. p.

不具块根。叶 3 浅裂至 3 全裂。花序总状或伞房状, 或花单朵顶生。萼片脱落, 蓝色或紫色, 稀白色, 多少展开, 稀上萼片船形; 距与萼片近等长或比萼片长, 稀比萼片短。花瓣与萼片同色, 稀淡黄色或黄白色。退化雄蕊瓣片, 也与萼片同色, 稀淡黄色或黄白色, 2 浅裂或 2 半裂, 稀不分裂, 腹面基部之上被黄色或白色髯毛。心皮 3, 稀 5。种子四面体形, 沿纵棱具狭翅或无翅, 或狭倒卵球形, 具密集横向排列的小鳞片。

约 190 种, 隶属于 6 亚组, 广布于亚洲、欧洲东北部、非洲和北美洲。我国有 6 亚组约 132 种, 多数种分布于西南部的四川、云南、西藏、青海等省(区), 西部、北部和东北部诸省各有 4 种至 1 种。

分种和变种检索表

1. 花瓣和退化雄蕊淡黄色或淡黄白色;萼片蓝色或紫色。
 2. 叶片 3 全裂;花单朵顶生;萼片比距长;花瓣淡黄白色;退化雄蕊瓣片淡黄白色,不分裂;心皮 5
..... 159. 湟中翠雀花 *Delphinium huangzhongense*
 2. 叶片 3 深裂;花组成总状花序;退化雄蕊瓣片 2 浅裂;心皮 3 或 1。
 3. 萼片与距近等长;花瓣和退化雄蕊淡黄色;心皮 3。
 4. 花较小,组成复总状花序;萼片长 6~7 mm,顶端以直角向内弯曲;心皮无毛
..... 160. 征镒翠雀花 *D. zhengyianum*
 4. 花较大,组成简单总状花序;萼片长 14 mm,不弯曲;子房被短柔毛
..... 161. 文采新翠雀花 *D. neowentsaii*
 3. 萼片比距短;花瓣和退化雄蕊黄白色;心皮 1,无毛 189. 单蕊翠雀花 *D. monogynum*
1. 花瓣和退化雄蕊与萼片同色,即呈蓝色或紫色,稀白色。
 5. 基生叶多不存在,或存在,则在花期枯萎。
 6. 种子具 3 纵棱,沿棱具狭翅。
 7. 心皮 4~6
 8. 叶片 3 全裂;心皮 5 98. 密叶翠雀花 *D. kingianum*
 9. 茎有毛;叶全裂片顶端急尖。
 10. 茎密被白色短柔毛和黄色短腺毛。
 11. 子房密被短柔毛 98a. 模式变种 var. *kingianum*
 11. 子房只在腹缝线上有毛,其他部分无毛
..... 98b. 光果密叶翠雀花 var. *leiocarpum*
 10. 茎密被白色短柔毛,具少数黄色腺毛 98c. 少腺密叶翠雀花 var. *eglandulosum*
 9. 茎无毛;叶全裂片顶端长渐尖 98d. 尖裂密叶翠雀花 var. *acuminatissimum*
 8. 叶片 3 深裂;心皮 4~6 99. 乡城翠雀花 *D. humilius*
 7. 心皮 3。
 12. 叶片 3 全裂;萼片比距长 100. 尾裂翠雀花 *D. caudatolobum*
 12. 叶片 3 深裂;萼片与距近等长,或比距短。
 13. 总状花序轴和花梗被白色短柔毛和黄色短腺毛 103. 拉萨翠雀花 *D. gyalanum*
 13. 总状花序轴和花梗无黄色腺毛。
 14. 总状花序轴和茎无毛。
 15. 植株高达 140 cm;萼片长 14~15 mm;退化雄蕊瓣片 2 浅裂
..... 106. 唇花翠雀花 *D. cheilanthum*
 16. 花梗被白色反曲短柔毛 106a. 模式变种 var. *cheilanthum*

16. 花梗被黄色伸展短毛 106b. 展毛唇花翠雀花 var. **pubescens**
15. 植株高达 20~30 cm; 萼片长 15~20 mm。
17. 叶侧生 1 回裂片 2 半裂; 萼片长 15~20 mm, 距长 18~24 mm; 退化雄蕊瓣片近圆形, 2 浅裂 104. 宽片翠雀花 **D. latilimbum**
17. 叶侧生 1 回裂片 2 深裂超过叶片中部; 萼片长 15~18 mm, 距长 20 mm; 退化雄蕊瓣片宽椭圆形, 顶端微凹 107. 毓泉翠雀花 **D. yuchuanii**
14. 花梗和茎有毛, 稀茎近无毛 (*D. hsinganense*)。
18. 萼片两面均有毛, 与距等长或稍长 101. 粗距翠雀花 **D. pachycentrum**
19. 萼片长圆形 101a. 模式变种 var. **pachycentrum**
19. 萼片披针形 101b. 狭萼粗距翠雀花 var. **lancisepalum**
18. 萼片内面无毛。
20. 花序复总状; 小苞片贴伏于花上, 狭披针形, 长 6~11 mm; 萼片长 13 mm; 退化雄蕊瓣片倒卵状长圆形, 有白色髯毛
..... 102. 拟粗距翠雀花 **D. pachycentroides**
20. 花序简单总状; 小苞片与花离开, 钻形, 长 3~5 mm; 萼片长 14~17 mm; 退化雄蕊瓣片圆卵形, 有黄色髯毛 105. 兴安翠雀花 **D. hsinganense**
6. 种子具密集横向排列的小鳞片或横波状条纹。
21. 叶片宽心形, 不分裂或不明显 3 浅裂 158. 心叶翠雀花 **D. calthifolium**
21. 叶片五角形或肾形, 3 浅裂, 3 深裂或 3 全裂。
22. 叶片 3 浅裂或 3 深裂。
23. 叶片 3 浅裂, 分裂不超过叶片中部。
24. 叶片 3 浅裂不达叶片中部, 浅裂片互相不覆压; 总状花序长 10 cm; 花梗被白色柔毛和黄色腺毛 135. 葡萄叶翠雀花 **D. sinovitifolium**
24. 叶片 3 浅裂达叶片中部, 浅裂片互相覆压; 伞房花序长 6 cm; 花梗无毛
..... 134. 茂县翠雀花 **D. maoxianense**
23. 叶片 3 深裂超过中部, 达近基部。
25. 花序伞房状。
26. 茎无毛。
27. 萼片背面顶端之下具角状突起 133. 叉角翠雀花 **D. furcatocornutum**
27. 萼片无角状突起。
28. 萼距螺旋状弯曲 137. 川黔翠雀花 **D. bonvalotii**
28. 萼距稍向下弯曲 130. 毛梗翠雀花 **D. eriostylum**
26. 茎有毛。
29. 茎被短柔毛; 叶片宽达 6 cm 131. 平武翠雀花 **D. pingwuense**
29. 茎被糙硬毛; 叶片宽达 12 cm。

30. 花梗有黄色腺毛 130. 毛梗翠雀花 *D. eriostylum*
 31. 花梗只被黄色腺毛;子房疏被柔毛 130a. 模式变种 var. *eriostylum*
 31. 花梗被黄色短腺毛和白色短柔毛;心皮无毛
 130b. 糙叶毛梗翠雀花 var. *hispidum*
30. 花梗无黄色腺毛 132. 疏伞翠雀花 *D. laxicyosum*
 32. 花梗无毛;萼距长 23~27 mm 132a. 模式变种 var. *laxicyosum*
 32. 花梗被短柔毛;萼距长 20 mm
 132b. 毛序疏伞翠雀花 var. *pilostachyum*
25. 花序总状。
33. 萼距直,稍向下弯曲,或成直角向下弯曲。
34. 萼片比距长;花梗长 5~9 cm 108. 长梗翠雀花 *D. longipedicellatum*
34. 萼片与距近等长或较短。
35. 萼片与距近等长。
36. 萼距向斜上方伸展,长 10~13 mm ... 110. 直距翠雀花 *D. orthocentrum*
36. 萼距不向上方伸展。
37. 茎被短柔毛;萼距水平方向伸展,长 12~16 mm。
38. 花梗有少数黄色腺毛;萼片长 12~18 mm,距长 10~16 mm;子房被短柔毛 111. 小瓣翠雀花 *D. micropetalum*
38. 花梗无黄色腺毛;萼片长 12 mm,距长 9~12 mm;心皮无毛.....
 109. 拟直距翠雀花 *D. orthocentroides*
37. 茎被长硬毛;萼距稍向下弯曲,长 20 mm
 112. 毛茎翠雀花 *D. hirticaule*
39. 花梗无毛 112a. 模式变种 var. *hirticaule*
39. 花梗有黄色腺毛 112b. 腺毛毛茎翠雀花 var. *mollipes*
35. 萼片比距短。
40. 小苞片与花邻接或近邻接,并贴伏于花上。
41. 小苞片狭条形 122. 阴地翠雀花 *D. umbrosum*
42. 小苞片宽 0.5~1.1 mm。
43. 茎高达 110 cm,被短糙伏毛;小苞片宽 0.5~0.6 mm
 122a. 模式变种 var. *umbrosum*
43. 茎高达 70 cm,被开展硬毛;小苞片宽 0.6~1.1 mm
 122b. 展毛阴地翠雀花 var. *hispidum*
42. 小苞片宽 1.5~1.8 mm
 122c. 宽苞阴地翠雀花 var. *drepanocentrum*
41. 小苞片条状披针形。

44. 茎被短糙伏毛;萼片外面被短柔毛 … 120. 滇川翠雀花 *D. delavayi*
45. 花梗被白色短糙伏毛和黄色短腺毛……………
- …………… 120a. 模式变种 var. **delavayi**
45. 花梗只被白色短糙伏毛 …… 120b. 保山翠雀花 var. **baoshanense**
44. 茎密被开展糙硬毛;萼片外面疏被糙硬毛 ……………
- …………… 121. 须花翠雀花 *D. pogonanthum*
46. 雄蕊无毛 …………… 121a. 模式变种 var. **pogonanthum**
46. 雄蕊花丝每侧有 1~2 根毛 ……………
- …………… 121b. 毛蕊须花翠雀花 var. **lasiandrum**
40. 小苞片多少与花分离,不贴伏花上。
47. 叶中央裂片不明显 3 浅裂或不分裂。
48. 叶中央裂片菱形,边缘中部之上具牙齿,中部之下全缘。
49. 萼片长 9 mm,距长 17 mm;茎被糙伏毛或无毛 ……………
- …………… 113. 淡紫翠雀花 *D. handelianum*
49. 萼片长 15~16 mm,距长 20~21 mm;茎无毛 ……………
- …………… 114. 河南翠雀花 *D. honanense*
50. 花梗被白色短柔毛和黄色短腺毛……………
- …………… 114a. 模式变种 var. **honanense**
50. 花梗无黄色腺毛…………… 114b. 毛梗河南翠雀花 var. **piliferum**
48. 叶中央裂片披针形,自基部之上至顶端有密集牙齿 ……………
- …………… 115. 毛叶翠雀花 *D. hirtifolium*
47. 叶中央裂片菱形,近中部明显 3 浅裂,稀 3 深裂。
51. 叶中央裂片宽菱形,3 深裂近中脉 ……………
- …………… 129. 假深蓝翠雀花 *D. pseudocyananthum*
51. 叶中央裂片菱形,3 浅裂。
52. 茎无毛。
53. 花梗无毛 …………… 136. 黑水翠雀花 *D. potaninii*
54. 心皮无毛;蓇葖直,长圆形,长 1.4~1.7 cm。
55. 小苞片宽 0.2~0.3 mm …… 136a. 模式变种 var. **potaninii**
55. 小苞片宽 1~1.2 mm ……………
- …………… 136b. 宽苞黑水翠雀花 var. **latibracteolatum**
54. 心皮有疏毛;蓇葖新月形,长 0.5~1 cm ……………
- …………… 136c. 九峰山翠雀花 var. **jiufengshanense**
53. 花梗有毛。
56. 花梗密被黄色短腺毛

57. 总状花序复杂;心皮无毛。
58. 草本高 1.5~2 m;花梗被白色短糙伏毛和黄色短腺毛;萼片长 11 mm,距长 18 mm;退化雄蕊瓣片 2 裂超过其中部
..... 125. 多花翠雀花 *D. polyanthum*
58. 草本高约 80 cm;花梗只被黄色短腺毛;萼片长 7~10 mm,距长 11~12 mm;退化雄蕊瓣片顶端微凹
..... 126. 左贡翠雀花 *D. zuogongense*
57. 总状花序简单;子房被柔毛
..... 127. 川西翠雀花 *D. tongolense*
59. 叶柄无毛 127a. 模式变种 var. *tongolense*
59. 叶柄被长硬毛 ... 127b. 毛柄川西翠雀花 var. *hirsutipes*
56. 花梗只被白色短柔毛,无黄色腺毛;总状花序复杂;草本高约 1 m
..... 128. 高茎翠雀花 *D. altissimum*
52. 茎有毛。
60. 茎和花梗被白色短柔毛和黄色短腺毛
..... 123. 米林翠雀花 *D. sherriffii*
60. 茎和花梗无黄色腺毛。
61. 茎被开展糙硬毛;退化雄蕊瓣片被黄色髯毛。
62. 总状花序简单;萼片外面被白色短柔毛和黄色短腺毛;退化雄蕊的爪细,比瓣狭约 5 倍
..... 116. 峨眉翠雀花 *D. omeiense*
63. 萼片长 12~16mm,距长 20~26 mm
..... 116a. 模式变种 var. *omeiense*
63. 萼片长 4~8mm,距长 7~18mm
..... 116b. 小花峨眉翠雀花 var. *micranthum*
62. 总状花序复杂;萼片外面只疏被黄色腺毛,无白色毛,长 10 mm,距长 20 mm;退化雄蕊的爪条形,比瓣片稍狭
..... 119. 宽爪翠雀花 *D. platyonychium*
61. 茎被柔毛。
64. 茎被开展柔毛;总状花序复杂;萼距长 23 mm
..... 124. 盐源翠雀花 *D. yanyuanense*
64. 茎被反曲短柔毛;总状花序简单;萼距长 17~18 mm。
65. 叶片 3 深裂至距基部 2~4 mm 处;上萼片狭卵形,13×6 mm;退化雄蕊瓣片被黄色髯毛
..... 117. 柔毛翠雀花 *D. pubescens*

65. 叶片3深裂至距基部6~7 mm处;上萼片宽卵形,10×7 mm;退化雄蕊瓣片被白色髯毛 118. 周城翠雀花 *D. zhouchengense*
33. 萼距向下成U字形或螺旋状弯曲。
66. 茎无毛。
67. 花梗无毛 136. 黑水翠雀花 *D. potaninii*
67. 花梗有毛。
68. 花梗只被黄色短腺毛;叶片宽达16 cm,3深裂稍超过中部;小苞片条形 141. 汶川翠雀花 *D. wenchuanense*
68. 花梗被白色短柔毛和黄色短腺毛;叶片宽达12 cm,3深裂至近基部;小苞片丝形。
69. 小苞片长4.5~7 mm;萼距长12~21 mm 140. 拟川西翠雀花 *D. pseudotongolense*
69. 小苞片长1.5~4 mm;萼距长18~24 mm 138. 拟螺距翠花 *D. bulleyanum*
70. 子房疏被柔毛 138a. 模式变种 var. *bulleyanum*
70. 心皮无毛 138b. 光果拟螺距翠雀花 var. *leiogynum*
66. 茎有毛。
71. 心皮无毛 139. 贡嘎翠雀花 *D. gonggaense*
71. 子房有毛。
72. 茎被开展硬毛;叶片宽达10(~14) cm;萼片长15~18 mm 142. 螺距翠雀花 *D. spirocentrum*
72. 茎被开展短柔毛;叶片宽达5.4 cm;萼片长12~13 mm 143. 狭菱形翠雀花 *D. angustirhombicum*
22. 叶片3全裂。
73. 叶全裂片细裂,末回裂片条状披针形 157. 塔城翠雀花 *D. aemulans*
73. 叶全裂片不细裂,末回裂片卵形或三角形。
74. 萼距长15 mm以下。
75. 茎、花梗和心皮均无毛 144. 疏花翠雀花 *D. sparsiflorum*
75. 茎和花梗有毛。
76. 草本高约100 cm;总状花序复杂;萼距长8~9 mm 145. 狭序翠雀花 *D. angustipaniculatum*
76. 草本高达60~80 cm;总状花序简单;萼距长12~15 mm。
77. 叶中央裂片菱形,在中部3浅裂,或近羽状分裂;子房被柔毛 146. 错那翠雀花 *D. conaense*
77. 叶中央裂片宽菱形,在中部之下3深裂;心皮无毛 147. 秀丽翠雀花 *D. wangii*
74. 萼距长20~28 mm。
78. 茎无毛。

79. 萼片无角状突起。

80. 花梗无毛。

81. 草本高达 110 (~150) cm; 叶片宽达 20 cm; 总状花序复杂; 小苞片长 2.5~3.5 mm; 萼距直或向下弯曲 151. 秦岭翠雀花 *D. giraldii*

81. 草本高达 70 cm; 叶片宽达 8 cm; 总状花序简单; 小苞片长 4~5 mm; 萼距螺旋状弯曲 152. 光茎翠雀花 *D. glabricaule*

80. 花梗有毛。

82. 花梗被白色短柔毛和黄色短腺毛; 总状花序简单 ... 148. 木里翠雀花 *D. muliense*

83. 小苞片披针形或披针状条形, 8~13 × 1.2~2 mm 148a. 模式变种 var. *muliense*

83. 小苞片近丝形, 3.5~4 × 0.2 mm 148b. 小苞木里翠雀花 var. *minutibracteolatum*

82. 花梗只被白色短柔毛, 无黄色腺毛; 总状花序复杂 153. 松潘翠雀花 *D. sutchuenense*

79. 萼片外回顶端之下具角状突起。

84. 花梗被白色短柔毛; 萼片角状突起极小, 不明显, 距水平伸展或稍向下弯曲; 心皮 3 153. 松潘翠雀花 *D. sutchuenense*

84. 花梗被黄色短腺毛; 萼片角状突起明显, 长 2.5~3.5, 距呈 U 字形或螺旋状弯曲; 心皮 3 (~4) 154. 弯距翠雀花 *D. campylocentrum*

78. 茎有毛。

85. 花梗无毛。

86. 叶片下面无毛; 萼片无毛, 距长 28 mm 156. 大藏翠雀花 *D. dazangense*

86. 叶片下面有毛; 萼片有毛, 距长 20 mm。

87. 茎下部被黄色硬毛; 萼片内面无毛 149. 壤塘翠雀花 *D. rangtangense*

87. 茎下部被白色硬毛; 萼片内面有疏毛 150b. 光序拟弯距翠雀花 *D. pseudocampylocentrum* var. *glabripes*

85. 花梗有毛。

88. 草本高 50 cm; 花梗疏被黄色短腺毛; 小苞片与花分开; 萼距长 17~22 mm; 子房有疏毛 150a. 拟弯距翠雀花 *D. pseudocampylocentrum* var. *pseudocampylocentrum*

88. 草本高 50~90 (~100) cm; 花梗密被白色短柔毛; 小苞片与花邻接; 萼距长 22~25 mm; 心皮无毛 155. 三小叶翠雀花 *D. trifoliolatum*

5. 基生叶发育, 稀不存在, 或存在时在花期枯萎。

89. 叶片 3 浅裂或 3 深裂。

90. 种子近四面体形, 沿纵棱具翅。

91. 萼片外面顶端之下具角状突起。
92. 叶片3裂稍超过中部,末回裂片卵形或宽三角,稀狭披针或披针状条形。
93. 叶一回中央裂片3次分裂…………… 166. 大理翠雀花 *D. taliense*
94. 叶末回裂片卵形或三角形。
95. 萼距基部粗2~3 mm。
96. 萼片外面被短柔毛。
97. 茎无毛。
98. 心皮无毛…………… 166a. 模式变种 var. *taliense*
98. 子房有毛…………… 166b. 毛蕊大理翠雀花 var. *glabrum*
97. 茎下部密被短柔毛…………… 166c. 毛茎大理翠雀花 var. *pubicaule*
96. 萼片外面被长硬毛…………… 166d. 硬毛大理翠雀花 var. *hirsutum*
95. 萼距基部粗4~5 mm…………… 166e. 粗距大理翠雀花 var. *platycentrum*
94. 叶末回裂片狭披针或披针状条形;萼距比萼片长2倍……………
…………… 166f. 长距大理翠雀花 var. *dolichocentrum*
93. 叶的1回中央裂片1~2次分裂…………… 167. 角萼翠雀花 *D. ceratophorum*
99. 萼片角状突起长1~2 mm。
100. 叶片宽达10 cm,末回裂片卵形或宽三角形。
101. 萼片外面疏被短糙伏毛(毛长约0.4 mm),角状突起长1.5~2 mm……………
…………… 167a. 模式变种 var. *ceratophoram*
101. 萼片外面被长硬毛(毛长约2 mm),角状突起长1~1.5 mm……………
…………… 167c. 毛角萼翠雀花 var. *hirsutum*
100. 叶片宽8~19 cm,末回裂片条状披针形;萼片角状突起长1.5~2 mm……………
…………… 167d. 粗壮角萼翠雀花 var. *robustum*
99. 萼片角状突起长在1 mm以下…………… 167b. 短角萼翠雀花 var. *brevicorniculatum*
92. 叶片3深裂至近叶片基部处。
102. 花梗上部被黄色短腺毛和白色硬毛;萼片长10~12 mm;退化雄蕊瓣片被白色髯毛
…………… 169. 短萼翠雀花 *D. brevisepalum*
102. 花梗无毛;萼片长14~22 mm;退化雄蕊瓣片被黄色髯毛。
103. 茎无毛;萼片长18~22 mm,角状突起长1 mm,距长24 mm……………
…………… 168. 拟角萼翠雀花 *D. ceratophoroides*
103. 茎下部被糙伏毛;萼片长14~16 mm,角状突起长1~1.5 mm,距长27~28 mm
…………… 170. 拟长距翠雀花 *D. dolichocentroides*
91. 萼片无角状突起。
104. 叶片3裂达或稍超过中部。

105. 花梗无毛 162. 钩距翠雀花 *D. hamatum*
105. 花梗被白色短柔毛和黄色短腺毛。
106. 茎近顶部被黄色短腺毛;萼片长 9 mm,距长 14~17 mm;心皮无毛
..... 163. 宽菱形翠雀花 *D. latirhombicum*
106. 茎无毛;萼片长 15~19 mm,距长 20~22 mm;子房被柔毛
..... 165. 宁朗山翠雀花 *D. ninglangshanicum*
104. 叶片 3 深裂至近基部处。
107. 萼片长 13~19 mm。
108. 花梗无黄色腺毛。
109. 花梗上部具 2 小苞片。
110. 总状花序长 2~6.5 (~16) cm;子房密被柔毛。
111. 总状花序长 16 cm;花梗长 3.5~10 cm ... 174. 岩瓦翠雀花 *D. yanwaense*
111. 总状花序长 2~6.5 cm;花梗长 1.4~3.2 cm。
112. 萼距长 25~27 mm;退化雄蕊瓣片 2 半裂,被白色髯毛
..... 172. 维西翠雀花 *D. weixiense*
112. 萼距长 18 mm;退化雄蕊瓣片顶端微凹,被黄色髯毛
..... 186. 洱源翠雀花 *D. lankongense*
110. 总状花序长 10~26 mm;子房只腹缝线有毛,其他部分无毛
..... 187. 密距翠雀花 *D. pycnocentrum*
109. 花梗在顶端具 2 条形小苞片 164. 拟阴地翠雀花 *D. umbrosoides*
108. 花梗被黄色短腺毛和白色短柔毛;萼距长 16~18 mm。
113. 茎无毛;雄蕊花丝有毛。
- 113'. 总状花序长 22 cm;退化雄蕊瓣片倒心形,宽 7 mm;花药无毛
..... 182. 倒心片翠雀花 *D. obcordatilimbium*
- 113'. 总状花序长 12~15 cm;退化雄蕊瓣片长圆形,宽 3 mm;花药背面有毛
..... 179. 毛药翠雀花 *D. lasiantherum*
113. 茎有毛;花丝无毛。
- 113". 茎被短柔毛,有 1 叶,基生叶约 7;退化雄蕊瓣片 2 裂稍超过中部,被白色髯毛;子房被短柔毛 171. 缺刻翠雀花 *D. incislobulatum*
- 113". 茎被糙伏毛,有数叶,基生叶在花期枯萎;退化雄蕊瓣片不分裂或 2 微裂,被黄色髯毛;心皮无毛 173. 甘孜翠雀花 *D. kantzeense*
107. 萼片长 20~30 mm。
114. 叶柄鞘发育良好,宽 8~15 mm 180. 鞘柄翠雀花 *D. coleopodium*
114. 叶柄鞘很狭窄或不存在。

115. 花梗无毛。

116. 茎被短柔毛;萼片长 9~14 mm,距长 17~24 mm;退化雄蕊瓣片 2 半裂
..... 178. 云南翠雀花 *D. yunnanense*

116. 茎无毛;萼片长 18 mm,距长 26~30 mm;退化雄蕊瓣片不分裂.....
..... 185. 凉山翠雀花 *D. liangshanense*

115. 花梗有毛。

117. 花梗有黄色腺毛。

118. 茎被硬毛;叶片两面疏被糙伏毛;萼距长 17~20 mm
..... 175. 永宁翠雀花 *D. yongningense*

118. 茎被短柔毛;叶片无毛;萼距长 22 mm
..... 176. 纸叶翠雀花 *D. pergameneum*

117. 花梗无黄色腺毛。

119. 草本高 3~8 cm;花梗被白色短柔毛;萼片长 15~16 mm,距长 25 mm
..... 181. 先驷翠雀花 *D. hui*

120. 叶片的中裂片具 3 齿;茎顶端具 1~2 花 181a. 模式变种 var. *hui*

120. 叶片的中裂片具 3~5 齿;茎顶端具 1~5(~10)花
..... 181b. 多裂叶翠雀花 var. *lobulibundum*

119. 草本高 11~18 cm;花梗被黄色短柔毛;萼距长 28~29 mm。

121. 茎下部疏被开展短柔毛;小苞片长 5 mm;退化雄蕊瓣片顶端圆形,不分
裂,全缘 183. 宁蒗翠雀花 *D. pseudohamatum*

121. 茎被反曲短柔毛;小苞片长(5~)7.5~9 mm;退化雄蕊瓣片顶端微凹或 2
微裂 184. 玉龙山翠雀花 *D. yulongshanicum*

90. 种子具密集横向排列的小鳞片;叶片 3 裂稍超过中部;萼片长 13~15 mm,距长 20~22 mm
..... 188. 会泽翠雀花 *D. hueizeense*

89. 叶片 3 全裂。

122. 种子近四面体形,沿纵棱具狭翅。

123. 花序总状。

124. 上萼片船形。

125. 叶片基部深心形,末回裂片三角形或狭披针形;萼距比萼片短,筒状钻形,长 11~18 mm
..... 190. 丽江翠雀花 *D. likiangense*

125. 叶片基部近截形,末回裂片条形;萼距比萼片长,近筒形,长 21~27(~30)mm
..... 191. 川甘翠雀花 *D. souliei*

124. 上萼片多少展开,不呈船形。

126. 叶的末回裂片卵形,三角形或狭披针形。

127. 萼片比距长或与距近等长。

128. 茎和花梗被短柔毛;萼片比距长,长 17~23 mm,距长 12~16 mm
 192. 墨脱翠雀花 *D. medogense*
128. 茎和花梗无毛;萼片和距均长 10~12 m 193. 德浚翠雀花 *D. yuanum*
127. 萼片比距短。
129. 茎密被开展短柔毛 210. 威海翠雀花 *D. weihaiense*
129. 茎被贴伏短柔毛或硬毛,或无毛。
130. 花梗被黄色短腺毛和白色短柔毛
 204b. 锐裂翠雀花 *D. thibeticum* var. *laceratilobum*
130. 花梗无黄色腺毛。
131. 花梗无毛;叶均基生 199. 短萼翠雀花 *D. breviscaposum*
131. 花梗有毛。
132. 茎和心皮无毛;萼距长 15 mm 194. 丝苞翠雀花 *D. filibracteolatum*
132. 茎和心皮有毛。
133. 退化雄蕊瓣片不分裂。
134. 萼距长 24~28 mm;退化雄蕊瓣片顶端啮蚀状
 201. 囊谦翠雀花 *D. nangchienense*
134. 萼距长 16~24 mm;退化雄蕊瓣片顶端微凹。
135. 小苞片狭长圆形,长 11~18 mm;萼距长达 19 mm
 195. 威宁翠雀花 *D. weiningense*
135. 小苞片狭条形或钻形,长 2.5~6 mm;萼距长达 24 mm
 200. 金沙翠雀花 *D. majus*
133. 退化雄蕊瓣片 2 裂。
136. 叶均基生,中央全裂片近楔形,1 回分裂,近顶端 2 浅裂或具 3 牙齿
 198. 察隅翠雀花 *D. chayuense*
136. 叶基生并茎生,中央全裂片 2 回分裂。
137. 茎被反曲短柔毛;叶中央全裂片楔状菱形;小苞片长圆形,长 9~12
 mm;萼片长 15~18 mm,距长 14~20 mm
 196. 太白翠雀花 *D. taipaicum*
137. 茎被开展硬毛;叶中央全裂片菱形;小苞片条形,长 7~8 mm;萼片
 长 10~14 mm,距长 20~24 mm
 197. 拟澜沧翠雀花 *D. pseudothibeticum*
126. 叶的全裂片细裂,末回裂片披针状条形、条形或狭条形。
138. 心皮 5。
139. 花序轴和花梗被反曲短柔毛,无黄色腺毛;萼片长 9 mm,距长 12 mm;退化雄蕊
 瓣片顶端微凹;心皮无毛 202. 五果翠雀花 *D. sinopentagynum*

139. 花序轴和花梗有黄色腺毛; 萼片长 15 mm, 距长 20~24 mm; 退化雄蕊瓣片 2 微裂; 子房被柔毛 203. 条裂翠雀花 *D. pseudomosoyense*
140. 花序轴和花梗被白色短柔毛和黄色短腺毛; 上萼片外面顶端之下有 1 小角状突起, 距长 20 mm; 花瓣顶端被缘毛 203a. 模式变种 var. *pseudomosoyense*
140. 花序轴和花梗只被黄色短腺毛, 无白色短柔毛; 上萼片无角状突起, 距长 21~24 mm; 花瓣无毛 203b. 疏毛条裂翠雀花 var. *subglabrum*
138. 心皮 3。
141. 退化雄蕊瓣片长圆形成倒卵状长圆形。
142. 花序轴和花梗无毛。
143. 叶末回裂片宽 6 mm; 总状花序长 25~45 cm; 萼距长 13~15 mm; 退化雄蕊瓣片长 4.6 mm, 2 半裂 177. 拟云南翠雀花 *D. pseudoyunnanense*
143. 叶末回裂片宽 1.6~3 mm; 总状花序长 10~20 cm; 萼距长 25~28 mm; 退化雄蕊长 8 mm, 2 微裂 205. 光轴翠雀花 *D. leiostachyum*
142. 花序轴和花梗有毛。
144. 花序轴和花梗只被白色短柔毛; 小苞片与花分开
..... 208. 孟获营翠雀花 *D. mosoyense*
144. 花序轴和花梗被白色短柔毛和黄色短腺毛; 小苞片与花邻接
..... 204a. 澜沧翠雀花 *D. thibeticum* var. *thibeticum*
141. 退化雄蕊瓣片宽倒卵形或近圆形。
145. 茎和花梗被短柔毛和短腺毛。
146. 茎和花梗密被开展白色短柔毛和白色短腺毛
..... 211. 烟台翠雀花 *D. chefoense*
146. 茎和花梗密被贴伏白色短腺毛和黄色开展短腺毛。
147. 子房被短柔毛 209d. 腺毛翠雀花 *D. grandiflorum* var. *glandulosum*
147. 心皮无毛 209e. 光果翠雀花 *D. grandiflorum* var. *leiocarpum*
145. 茎和花梗只被柔毛, 无腺毛。
148. 花序轴和花梗近无毛或有极稀疏毛。
149. 茎无毛或下部有稀疏硬毛; 萼片与距近等长
..... 207. 秋翠雀花 *D. autumnale*
149. 茎被极稀疏开展短柔毛 206. 光序翠雀花 *D. kamaonense*
150. 萼距比萼片稍短, 长 12~16 mm 206a. 模式变种 var. *kamaonense*
150. 萼距比萼片长, 长 18~25 mm ... 206b. 展毛光序翠雀花 var. *glabrescens*
148. 花序轴和花梗密被柔毛 209. 翠雀 *D. grandiflorum*
151. 茎和花梗只密被贴伏短柔毛。
152. 子房密被短柔毛 209a. 模式变种 var. *grandiflorum*
152. 心皮无毛 209c. 安泽翠雀花 var. *deinocarpum*

151. 茎和花梗密被贴伏短柔毛,此外还有开展长柔毛
 209b. 疏毛翠雀花 var. **pilosum**
123. 花序伞房状,或花单朵顶生。
153. 心皮 5。
154. 萼片比距短,下萼片不呈船形,不具角状突起;退化雄蕊瓣片被黄色髯毛。
155. 萼距近筒形。
156. 茎只被白色短柔毛,无黄色腺毛 212. 宽距翠雀花 **D. beesianum**
157. 叶的中央全裂片和侧全裂片的 2 回裂片均有小裂片。
158. 叶的末回裂片宽 2~3.5 mm 212a. 模式变种 var. **beesianum**
158. 叶的末回裂片宽 3~7 mm 212b. 粗裂宽距翠雀花 var. **latisectum**
157. 叶的中央全裂片和侧全裂片的 2 回裂片均无小裂片
 212c. 辐裂宽距翠雀花 var. **radiatifolium**
156. 茎被白色短柔毛和黄色短腺毛
 213d. 粗距蓝翠雀花 **D. caeruleum** var. **crassicalcaratum**
155. 萼距钻形。
159. 叶的末回裂片宽 1.5~2.5 (~4) mm;萼距基部粗 3 mm;退化雄蕊瓣片宽倒卵形或近圆形,顶端全缘或微凹 213. 蓝翠雀花 **D. caeruleum**
160. 茎和叶柄被贴伏短柔毛。
161. 叶片宽达 5 cm 213a. 模式变种 var. **caeruleum**
161. 叶片宽达 12 cm 213c. 大叶蓝翠雀花 var. **majus**
160. 茎和叶柄被开展短柔毛 213b. 钝裂蓝翠雀花 var. **obtusilobum**
159. 叶的末回裂片宽 0.5~1.5 mm;萼距基部粗 2 mm;退化雄蕊片斜卵形,2 半裂
 215. 细距翠雀花 **D. lagarocentrum**
154. 萼片与距近等长;下萼片近顶端呈船形,有时具小角状突起;退化雄蕊瓣片被白色髯毛
 214. 永登翠雀花 **D. yongdengense**
153. 心皮 3。
162. 花梗被白色短柔毛和黄色短腺毛。
163. 花梗全部被白色短柔毛和黄色短腺毛;退化雄蕊瓣片宽倒卵形。
164. 草本高 30~80 cm;茎被贴伏短柔毛;伞房花序有 3~12 花;萼距长 20~25 mm
 217. 康定翠雀花 **D. tatsienense**
165. 叶末回裂片宽 1.5~2.5 (~4) mm;萼片内面无毛 217a. 模式变种 var. **tatsienense**
165. 叶末回裂片宽 0.5~1.5 mm;萼片内面有短毛
 217b. 班玛翠雀花 var. **chinghaiense**
164. 草本高 10~16.5 cm;茎被开展短柔毛;伞房花序有(1~)2(~3)花;萼距长 33~38 mm
 218. 矮翠雀花 **D. pumilum**

163. 花梗只在顶端被白色短柔毛和黄色短腺毛, 其他部分无毛; 退化雄蕊瓣片宽长圆形, 长 13 mm 219. 硕片翠雀花 *D. grandilimum*
162. 花梗无黄色腺毛。
166. 退化雄蕊的爪狭楔形, 比瓣片短, 比瓣片窄 2 倍 220. 波密翠雀花 *D. pomeense*
166. 退化雄蕊的爪细, 与萼片近等长, 比瓣片窄 5~6 倍。
167. 叶基生并茎生。
168. 叶片分裂程度小, 末回裂片三角形或狭卵形; 种子椭圆体形, 其纵棱不明显, 无翅 216. 谷地翠雀花 *D. davidii*
168. 叶片强度分裂, 全裂片细裂, 末回裂片披针状条形、条形或狭条形。
169. 草本高 90~100 cm; 叶末回裂片狭条形, 宽 1.5~1.8 mm; 伞房花序有 2~5 花 221. 拟蓝翠雀花 *D. pseudocaeruleum*
169. 草本高达 22~40 cm。
170. 茎和花梗被开展短柔毛; 叶的末回裂片宽 3.5 mm; 萼距长 25 mm; 伞房花序有 2 花 222. 软毛翠雀花 *D. mollipilum*
170. 茎和花梗被贴伏短柔毛。
171. 草本高 30~40 cm; 花组成具 2~3 花的伞房花序。
172. 叶片宽达 9.5 cm, 侧全裂片 3 回细裂, 末回条形裂片宽 2.5~4 mm; 退化雄蕊瓣片顶端微凹 209f. 房山翠雀花 *D. grandiflorum* var. *fangshanense*
172. 叶片宽达 5 cm, 侧全裂片 1 回深裂, 末回条形裂片宽 1~2 mm; 退化雄蕊瓣片顶端 2 微裂 225. 狭裂翠雀花 *D. lagarolobum*
171. 草本高 12~22 cm; 花单朵顶生; 退化雄蕊瓣片 2 半裂 226. 李恒翠雀花 *D. lihengianum*
167. 叶全部基生。
173. 花葶被短柔毛, 顶端有 1(~2) 花; 萼片长 16 mm, 距长 22~24 mm; 退化雄蕊瓣片 2 浅裂, 被白色髯毛 223. 花葶翠雀花 *D. sinoscaposum*
173. 花葶被硬毛, 顶端有 1 花; 萼片长 23~24 mm, 距长 27 mm; 退化雄蕊瓣片 2 深裂稍超过中部, 被黄色髯毛 224. 岩生翠雀花 *D. saxatile*
122. 种子具横向的条纹或小鳞片; 萼距长达 25 mm。
174. 种子近四面体形, 具横向的条纹; 叶片 3 深裂至近基部处; 总状或近伞房状花序, 具少数花, 轴和花梗无毛 227. 长距翠雀花 *D. tenii*
174. 种子倒卵球形, 具横向排列的小鳞片。
175. 草本高约 100 cm; 茎无毛; 萼距长 15~22 mm; 花序近伞房状, 有 2~3 花, 花梗无毛; 心皮无毛 228. 水城翠雀花 *D. shuichengense*
175. 草本高约 60 cm; 茎被贴伏短柔毛; 花序伞房状, 有 2 花, 花梗被贴伏短柔毛; 子房密被短柔毛 229. 多枝翠雀花 *D. maximowiczii*

Key to species and varieties

1. Petals and staminodes yellowish or yellowish-white; sepals blue or purple.
 2. Leaf blades 3-sect; flowers solitary and terminal; sepals longer than spur; petals yellowish-white; staminode limbs yellowish-white, undivided; carpels 5 159. **Delphinium huangzhongense**
 2. Leaf blades 3-parted; flowers in racemes; staminode limbs 2-lobed; carpels 3 or 1.
 3. Sepals nearly as long as spur; petals and staminodes yellowish; carpels 3.
 4. Flowers smaller, in compound racemes; sepals 6–7 mm long, with apexes by right angle incurved; carpels glabrous 160. **D. zhengyanum**
 4. Flowers larger, in simple racemes; sepals 14 mm long, not incurved; ovaries puberulous 161. **D. neowentsaii**
 3. Sepals shorter than spur; petals and staminodes yellowish-white; carpel 1, glabrous 189. **D. monogynum**
1. Petals and staminodes concolour with sepals, i. e. blue and purple, rarely white.
 5. Basal leaves absent, or present, then withered by anthesis.
 6. Seed with 3 longitudinal edges and along edges narrow-winged.
 7. Carpels 4–6.
 8. Leaf blades 3-sect; carpels 5 98. **D. kingianum**
 9. Stems hairy; leaf segments at apex acute.
 10. Stems densely white-puberulous and yellow-glandular-puberulous.
 11. Ovaries densely puberulous 98a. var. **kingianum**
 11. Ovaries only on ventral sutures hairy, elsewhere glabrous 98b. var. **leiocarpum**
 10. Stems densely white-puberulous and mixed with a few yellow glandular hairs 98c. var. **eglandulosum**
 9. Stems glabrous; leaf segments at apex long acuminate 98d. var. **acuminatissimum**
 8. Leaf blades 3-parted; carpels 4–6 99. **D. humilius**
 7. Carpels 3.
 12. Leaf blades 3-sect; sepals longer than spur 100. **D. caudatolobum**
 12. Leaf blades 3-parted; sepals nearly as long as spur or shorter than it.
 13. Raceme rachis and pedicels white-puberulous and yellow-glandular-puberulous 103. **D. gyalanum**
 13. Raceme rachis and pedicels laching yellow glandular hairs.
 14. Stems and pedicels glabrous.
 15. Herbs up to 140 cm tall; sepals 14–15 mm long; staminode limbs 2-lobed 106. **D. cheilanthum**
 16. Pedicels retrorsely white-puberulous 106a. var. **cheilanthum**
 16. Pedicels spreadingly yellow-puberulous 106b. var. **pubescens**

15. Herbs up to 20–30 cm tall; sepals 15–20 mm long.
17. Leaf primary lateral lobes 2-cleft; sepals 15–20 mm long, spur 18–24 mm long; staminode limbs suborbicular, 2-lobed 104. **D. latilimum**
17. Leaf primary lateral lobes 2-parted exceeding the middle of lobe; sepals 15–18 mm long, spur 20 mm long; staminode limbs broad-elliptic, at apex emarginate 107. **D. yuchuanii**
14. Stems and pedicels hairy, rarely stems subglabrous (*D. hsinganense*).
18. Sepals on both surfaces hairy, nearly as long as spur or slightly longer than it 101. **D. pachycentrum**
19. Sepals oblong 101a. var. **pachycentrum**
19. Sepals lanceolate 101b. var. **lancisepalum**
18. Sepals inside glabrous.
20. Compound racemes; bracteoles appressed on flower, narrow-lanceolate, 6–11 mm long; sepals 13 mm long; staminode limbs obovate-oblong, white-barbate 102. **D. pachycentroides**
20. Simple racemes; bracteoles remote from flower, subulate, 3–5 mm long; sepals 14–17 mm long; staminode limbs orbicular-ovate, yellow-barbate 105. **D. hsinganense**
6. Seeds densely transversely squamulose or striate.
21. Leaf blades broad-cordate, undivided or inconspicuously 3-lobulate 158. **D. calthifolium**
21. Leaf blades pentagonal or reniform, 3-lobed, 3-parted or 3-sect.
22. Leaf blades 3-lobed or 3-parted.
23. Leaf blades 3-lobed not exceeding the middle of blade.
24. Leaf blades 3-lobed not to the middle of blade, lobes not imbricate among themselves; inflorescences racemose, 10 cm long; pedicels white-puberulous and yellow-glandular-puberulous 135. **D. sinovitifolium**
24. Leaf blades 3-cleft to the middle of blade, with lobes imbricate among themselves; inflorescences corymbose, 6 cm long; pedicels glabrous 134. **D. maoxianense**
23. Leaf blades 3-parted exceeding the middle of blades.
25. Inflorescences corymbose.
26. Stems glabrous.
27. Sepals abaxially below apex corniculate 133. **D. furcatocornutum**
27. Sepals not corniculate.
28. Sepal spur spirally curved 137. **D. bonvalotii**
28. Sepal spur slightly recurved 130. **D. eriostylum**
26. Stems hairy.
29. Stems puberulous; leaf blades up to 6 cm broad 131. **D. pingwuense**

29. Stems hispid; leaf blades up to 12 cm broad.
30. Pedicels with yellow glandular hairs 130. **D. eriostylum**
31. Pedicels only yellow-glandular-puberulous; ovaries sparsely pubescent
..... 130a. var. **eriostylum**
31. Pedicels white-puberulous and yellow-glandular-puberulous; carpels glabrous
..... 130b. var. **hispidum**
30. Pedicels lacking yellow-glandular hairs 132. **D. laxicosum**
32. Pedicels glabrous; sepal spur 23–27 mm long 132a. var. **laxicosum**
32. Pedicels puberulous; sepal spur 20 mm long 132b. var. **pilostachyum**
25. Inflorescences racemose.
33. Sepal spur straight, slightly or by right angle recurved.
34. Sepals longer than spur; pedicels 5–9 cm long 108. **D. longipedicellatum**
34. Sepals nearly as long as or shorter than spur.
35. Sepals nearly as long as spur.
36. Sepal spur upwards spreading, 10–13 mm long 110. **D. orthocentrum**
36. Sepal spur not upwards spreading.
37. Stems puberulous; sepal spur horizontally spreading, 12–16 mm long.
38. Pedicels with few yellow glandular hairs; sepals 12–18 mm long, spur
10–16 mm long; ovaries puberulous 111. **D. micropetalum**
38. Pedicels lacking yellow glandular hairs; sepals 12 mm long, spur 9–12
mm long; carpels glabrous 109. **D. orthocentroides**
37. Stems hispid; sepal spur slightly recurved, 20 mm long
..... 112. **D. hirticaule**
39. Pedicels glabrous 112a. var. **hirticaule**
39. Pedicels with yellow glandular hairs 112b. var. **mollipes**
35. Sepals shorter than spur.
40. Bracteoles contiguous or nearly contiguous to the flower and appressed to it.
41. Bracteoles narrow-linear 122. **D. umbrosum**
42. Bracteoles 0.5–1.1 mm broad.
43. Stems up to 110 cm tall, strigillose; bracteoles 0.5–0.6 mm broad
..... 122a. var. **umbrosum**
43. Stems up to 70 cm tall, hispid; bracteoles 0.6–1.1 mm broad
..... 122b. var. **hispidum**
42. Bracteoles 1.5–1.8 mm broad 122c. var. **drepanocentrum**
41. Bracteoles linear-lanceolate.
44. Stems strigillose; sepals outside puberulous 120. **D. delavayi**

45. Pedicels white-strigillose and yellow-glandular-puberulous
 120a. var. **delavayi**
45. Pedicels only white-strigillose 120b. var. **baoshanense**
44. Stems hispid; sepals outside sparsely hispid ... 121. **D. pogonanthum**
46. Stamens glabrous 121a. var. **pogonanthum**
46. Stamen filaments at each side on margin with 1–2 hairs
 121b. var. **lasiandrum**
40. Bracteoles remote from flower and not appressed to it.
47. Leaf central lobe inconspicuously 3-lobed or undivided.
48. Leaf central lobe rhombic, on margin above the middle densely dentate
 and below the middle entire.
49. Sepals 9 mm long, spur 17 mm long; stems strigose or glabrous
 113. **D. handelianum**
49. Sepals 15–16 mm long, spur 20–21 mm long; stems glabrous
 114. **D. honanense**
50. Pedicels white-puberulous and yellow-glandular-puberulous
 114a. var. **honanense**
50. Pedicels only white-puberulous 114b. var. **piliferum**
48. Leaf central lobe lanceolate, on margin from above base to apex densely
 dentate 115. **D. hirtifolium**
47. Leaf central lobe rhombic, near the middle conspicuously 3-lobed, rarely 3-
 parted.
51. Leaf central lobe wide rhombic, near midrib 3-parted
 129. **D. pseudocyananthum**
51. Leaf central lobe rhombic, 3-lobed.
52. Stems glabrous.
53. Pedicels glabrous 136. **D. potaninii**
54. Carpels glabrous; follicles straight, oblong, 1.4–1.7 cm long.
55. Bracteoles 0.2–0.3 mm broad 136a. var. **potaninii**
55. Bracteoles 1–1.2 mm broad 136b. var. **latibracteolatum**
54. Carpels with sparse hairs; follicles lunated, 0.5–1 cm long ...
 136c. var. **jiufengshanense**
53. Pedicels hairy.
56. Pedicels densely yellow-glandular-puberulous.
57. Racemes compound; carpels glabrous.
58. Herbs 1.5–2 m tall; pedicels white-strigillose and yellow-
 glandular-puberulous; sepals 11 mm long, spur 18 mm long;
 staminode limbs 2-parted exceeding the middle of limb ...
 125. **D. polyanthum**

58. Herbs ca. 80 cm tall; pedicels only yellow-glandular-puberulous; sepals 7 – 10 mm long, spur 11– 13 mm long; staminode limbs at apex emarginate 126. **D. zuogongense**
57. Racemes simple; ovaries pubescent 127. **D. tongolense**
59. Petioles glabrous 127a. var. **tongolense**
59. Petioles hirsute 127b. var. **hirsutipes**
56. Pedicels only white-puberulous, lacking yellow glandular hairs; racemes compound; herbs ca. 1 m tall 128. **D. altissimum**
52. Stems hairy.
60. Stems and pedicels white-puberulous and yellow-glandular-puberulous 123. **D. sherriffii**
60. Stems and pedicels lacking yellow glandular hairs.
61. Stems hispid; staminode limbs yellow-barbate.
62. Racemes simple; sepals outside white-puberulous and yellow-glandular-puberulous; staminode claws slender, ca. 5 times narrower than limbs 116. **D. omeiense**
63. Sepals 12–16 mm long, spur 20–26 mm long 116a. var. **omeiense**
63. Sepals 4–8 mm long, spur 7–18 mm long 116b. var. **micranthum**
62. Racemes compound; sepals outside only with yellow glandular hairs, 10 mm long, spur 20 mm long; staminode claws linear, slightly narrower than limbs 119. **D. platyonychium**
61. Stems pubescent.
64. Stems spreading-pubescent; racemes compound; sepal spur 23 mm long 124. **D. yanyuanense**
64. Stems retrorsely puberulous; racemes simple; sepal spur 17–18 mm long.
65. Leaf blades 3-parted to 2–4 mm above base; upper sepal narrow-ovate, 13 × 6 mm; staminode limbs yellow-barbate 117. **D. pubescens**
65. Leaf blades 3-parted to 6–7 mm above base; upper sepal broad-ovate, 10 × 7 mm; staminode limbs white-barbate 118. **D. zhouchengense**
33. Sepal spur by U-form or spirally recurved.
66. Stems glabrous.
67. Pedicels glabrous 136. **D. potaninii**
67. Pedicels hairy.

68. Pedicels only yellow-glandular-puberulous; leaf blades up to 16 cm broad, 3-parted slightly exceeding the middle of blade; bracteoles linear 141. **D. wenchuanense**
68. Pedicels white-puberulous and yellow-glandular-puberulous; leaf blades up to 12 cm broad, 3-parted to near the base of blade; bracteoles filiform.
69. Bracteoles 4.5–7 mm long; sepal spur 12–21 mm long 140. **D. pseudotongolense**
69. Bracteoles 1.5–4 mm long; sepal spur 18–24 mm long 138. **D. bulleyanum**
70. Ovaries sparsely pubescent 138a. var. **bulleyanum**
70. Carpels glabrous 138b. var. **leiogynum**
66. Stems hairy.
71. Carpels glabrous 139. **D. gonggaense**
71. Ovaries hairy.
72. Stems hispid; leaf blades up to 10(–14) cm broad; sepals 15–18 mm long 142. **D. spirocentrum**
72. Stems spreading-puberulous; leaf blade up to 5.4 cm broad; sepals 12–13 mm long 143. **D. angustirhombicum**
22. Leaf blades 3-sect.
73. Leaf segments dissected, with ultimate lobes linear-lanceolate 157. **D. aemulans**
73. Leaf segments not dissected, with ultimate lobes ovate or triangular.
74. Sepal spur less than 15 mm long.
75. Stems, pedicels and carpels glabrous 144. **D. sparsiflorum**
75. Stems and pedicels hairy.
76. Herbs ca. 100 cm tall; racemes compound; sepal spur 8–9 mm long 145. **D. angustipaniculatum**
76. Herbs 60–80 cm tall; racemes simple; sepal spur 12–15 mm long.
77. Leaf central lobe rhombic, at the middle 3-lobed or subpinnately divided; ovaries pubescent 146. **D. conaense**
77. Leaf central broad-rhombic, below the middle 3-parted; carpels glabrous 147. **D. wangii**
74. Sepal spur 20–28 mm long.
78. Stems glabrous.
79. Sepals not corniculate.
80. Pedicels glabrous.
81. Herbs up to 110 (–150) cm tall; leaf blades up to 20 cm broad; racemes compound; bracteoles 2.5–3.5 mm long; sepal spur straight or recurved 151. **D. giraldii**

81. Herbs up to 70 cm tall; leaf blades up to 8 cm broad; racemes simple; bracteoles 4–5 mm long; sepal spur spirally recurved 152. **D. glabricaule**
80. Pedicels hairy.
82. Pedicels white-puberulous and yellow-glandular-puberulous; racemes simple 148. **D. muliense**
83. Bracteoles lanceolate or lanceolate-linear, 8–13 × 1.2–2 mm 148a. var. **muliense**
83. Bracteoles subfiliform, 3.5–4 × 0.2 mm 148b. var. **minutibracteolatum**
82. Pedicels only white-puberulous; racemes compound 153. **D. sutchuenense**
79. Sepals outside below apex corniculate.
84. Pedicels white-puberulous; sepal horn-like projections minute, inconspicuous; spur horizontally spreading or slightly recurved 153. **D. sutchuenense**
84. Pedicels yellow-glandular-puberulous; sepals with conspicuous horn-like projections 2.5–3.5 mm long, spur by U-form or spirally recurved 154. **D. campylocentrum**
78. Stems hairy.
85. Pedicels glabrous.
86. Leaf blades abaxially glabrous; sepals glabrous, spur 28 mm long 156. **D. dazangense**
86. Leaf blades abaxially hairy; sepals hairy, spur 20 mm long.
87. Stems below yellow-hispid; sepals inside glabrous ... 149. **D. rangtangense**
87. Stems below white-hispid; sepals inside with sparse hairs 150b. **D. pseudocampylocentrum** var. **glabripes**
85. Pedicels hairy.
88. Herbs ca. 50 cm tall; pedicels sparsely yellow-glandular-puberulous; bracteoles remote from flower; sepal spur 17–22 mm long; staminode limbs yellow-barbate; ovaries with sparse hairs 150a. **D. pseudocampylocentrum** var. **pseudocampylocentrum**
88. Herbs 50–90 (–100) cm tall; pedicels densely white-puberulous; bracteoles contiguous to flower; sepal spur 22–25 mm long; staminode limbs not barbate; carpels glabrous 155. **D. trifoliolatum**
5. Basal leaves well developed, rarely absent or present but withered by anthesis.
89. Leaf blades 3-lobed or 3-parted.
90. Seeds subtetrahedral, along edges narrow-winged.
91. Sepals outside below apex corniculate.
92. Leaf blades 3-parted slightly exceeding the middle of blade, with ultimate lobes ovate or broad-triangular, rarely narrow-lanceolate or lanceolate-linear.

93. Leaf central lobe thrice divided 166. **D. taliense**
94. Leaf ultimate lobes ovate or triangular.
95. Sepal spur at base 2–3 mm across.
96. Sepals outside puberulous.
97. Stem glabrous.
98. Carpels glabrous 166a. var. **taliense**
98. Ovaries puberulous 166b. var. **glabrum**
97. Stems below densely puberulous 166c. var. **pubicaule**
96. Sepals outside hirsute 166d. var. **hirsutum**
95. Sepal spur at base 4–5 mm across 166e. var. **platycentrum**
94. Leaf ultimate lobes narrow-lanceolate or lanceolate-linear; sepal spur 2 times longer than sepals 166f. var. **dolichocentrum**
93. Leaf central lobe once or twice divided 167. **D. ceratophorum**
99. Sepals with horn-like projections 1–2 mm long.
100. Leaf blades up to 10 cm broad, ultimate lobes ovate or triangular.
101. Sepal outside sparsely strigillose (hairs ca. 0.4 mm long), with horn-like projections 1.5–2 mm long 167a. var. **ceratophorum**
101. Sepals outside hirsute (hairs ca. 2 mm long), with horn-like projections 1–1.5 mm long 167c. var. **hirsutum**
100. Leaf blades 8–19 cm broad, ultimate lobes linear-lanceolate; sepal horn-like projections 1.5–2 mm long 167d. var. **robustum**
99. Sepal horn-like projections less than 1 mm long 167b. var. **brevicorniculatum**
92. Leaf blades 3-parted to near the base of blade.
102. Pedicels above yellow-glandular-puberulous and white-hispid; sepals 10–12 mm long; staminode limbs white-barbate 169. **D. brevisepalum**
102. Pedicels glabrous; sepals 14–22 mm long; staminode limbs yellow-barbate.
103. Stems glabrous; sepals 18–22 mm long, horn-like projections 1 mm long, spur 24 mm long 168. **D. ceratophoroides**
103. Stems below strigose; sepals 14–16 mm long, horn-like projections 1–1.5 mm long, spur 27–28 mm long 170. **D. dolichocentroides**
91. Sepals not corniculate.
104. Leaf blades 3-cleft or 3-parted slightly exceeding the middle of blade.
105. Pedicels glabrous 162. **D. hamatum**
105. Pedicels white-puberulous and yellow-glandular-puberulous.
106. Stems near apex yellow-glandular-puberulous; sepals 9 mm long, spur 14–17 mm long; carpels glabrous 163. **D. latirhombicum**
106. Stems glabrous; sepals 15–19 mm long; ovaries pubescent
..... 165. **D. ninglangshanicum**
104. Leaf blades 3-parted to near the base of blade.

107. Sepals 13–19 mm long.
108. Pedicels lacking yellow glandular hairs.
109. Pedicels above 2-bracteolate.
110. Racemes 2–6.5(–16) cm long; ovaries densely pubescent.
111. Racemes 16 cm long; pedicels 3.5–10 cm long 174. **D. yanwaense**
111. Racemes 2–6.5 cm long; pedicels 1.4–3.2 cm long.
112. Sepal spur 25–27 mm long; staminode limbs 2-cleft, white-barbate
..... 172. **D. weixiense**
112. Sepal spur 18 mm long; staminode limbs at apex emarginate, yellow-barbate
..... 186. **D. lankongense**
110. Racemes 10–26 cm long; ovaries only on ventral sutures hairy, elsewhere gla-
brous 187. **D. pycnocentrum**
109. Pedicels on apex 2-bracteolate (bracteoles linear) 164. **D. umbrosoides**
108. Pedicels yellow-glandular-puberulous and white-puberulous; sepal spur 16–18 mm
long.
113. Stem glabrous; stamen filaments hairy.
- 113'. Racemes 22 cm long; staminode limbs obcordate, 7 mm broad; anthers glabrous
..... 182. **D. obcordatilimum**
- 113'. Racemes 12–15 cm long; staminode limbs oblong, 3 mm broad; anthers abaxi-
ally hair 179. **D. lasiantherum**
113. Stems hairy; filaments glabrous.
- 113". Stems puberulous, 1-leaved; basal leaves ca. 7; staminode limbs 2-parted
slightly exceeding the middle of limb, white-barbate; ovaries puberulous
..... 171. **D. incislobulatum**
- 113". Stems strigose, several-leaved; basal leaves withered by anthesis; staminode
limbs undivided or at apex 2-lobulate, yellow-barbate; carpels glabrous ...
..... 173. **D. kantzeense**
107. Sepals 20–30 mm long.
114. Leaf sheaths well developed, 8–15 mm broad 180. **D. coleopodum**
114. Leaf sheaths narrow or absent.
115. Pedicels glabrous.
116. Stems puberulous; sepals 9–14 mm long, spur 17–24 mm long; staminode
limbs 2-cleft 178. **D. yunnanense**
116. Stems glabrous; sepals 18 mm long, spur 26–30 mm long; staminode limbs
undivided 185. **D. liangshanense**
115. Pedicels hairy.
117. Pedicels with yellow glandular hairs.
118. Stems hispid; leaf blades on both surfaces sparsely strigose; sepal spur 17–26
mm long 175. **D. yongningense**

118. Stems puberulous; leaf blades glabrous; sepal spur 22 mm long
 176. **D. pergameneum**
117. Pedicels lacking yellow glandular hairs.
119. Herbs 3–8 cm tall; pedicels white-puberulous; sepals 15–16 mm long, spur
 25 mm long 181. **D. hui**
120. Leaf blade with central lobe 3-dentate; stem apex 1–2-flowered
 181a. var. **hui**
120. Leaf blade with central lobe 3–5-dentate; stem apex 1–5(–10)-flowered
 181b. var. **lobulibundum**
119. Herbs 11–18 cm tall; pedicels yellow-puberulous; sepal spur 28–29 mm
 long.
121. Stems below sparsely spreading-puberulous; bracteoles 5 mm long; stamin-
 ode limbs at apex rounded and entire 183. **D. pseudohamatum**
121. Stems retrorse-puberulous; bracteoles (5–)7.5–9 mm long; staminode
 limbs at apex emarginate or 2-lobulate 184. **D. yulongshanicum**
90. Seeds densely transversely squamulose; leaf blades 3-parted slightly exceeding the middle of
 blade; sepals 13–15 mm long, spur 20–22 mm long 188. **D. hueizeense**
89. Leaf blades 3-sect.
122. Seeds subtetrahedral, along longitudinal edges narrow-winged.
123. Inflorescences racemose.
124. Upper sepal eymbiform.
125. Leaf blades at base deep-cordate, ultimate lobes triangular or narrow-lanceolate; sepal
 spur shorter than sepals, tubular-subulate, 11–18 mm long 190. **D. likiangense**
125. Leaf blades at base subtruncate, ultimate lobes linear; sepal spur longer than sepals,
 subtubular, 21–27(–30) mm long 191. **D. souliei**
124. Upper sepal more or less flat, not cymbiform.
126. Leaf ultimate lobes ovate, triangular or narrow-lanceolate.
127. Sepals longer than spur or nearly as long as it.
128. Stems and pedicels puberulous; sepals longer than spur, 17–23 mm long; spur
 12–16 mm long 192. **D. medogense**
128. Stems and pedicels glabrous; sepals and spur 10–12 mm long
 193. **D. yuanum**
127. Sepals shorter than spur.
129. Stems densely spreading-puberulous 210. **D. weihaiense**
129. Stems appressed-puberulous, hispid or glabrous.
130. Pedicels yellow-glandular-puberulous and white-puberulous
 204b. **D. thibeticum** var. **laceratilobum**
130. Pedicels lacking yellow glandular hairs.
131. Pedicels glabrous; leaves all basal 199. **D. breviscaposum**

131. Pedicels hairy.
132. Stems and carpels glabrous; sepal spur 15 mm long 194. **D. filibracteolatum**
132. Stems and carpels hairy.
133. Staminode limbs undivided.
134. Sepal spur 24–28 mm long; staminode limbs at apex erose 201. **D. nangchienense**
134. Sepal spur 16–24 mm long; staminode limbs at apex emarginate.
135. Bracteoles narrow-oblong, 11–18 mm long; sepal spur up to 19 mm long 195. **D. weiningense**
135. Bracteoles narrow-linear or subulate, 2.5–6 mm long; sepal spur up to 24 mm long 200. **D. majus**
133. Staminode limbs 2-lobed.
136. Leaves all basal, central segment subcuneate, once divided, near apex 3-lobed or 3-dentate 198. **D. chayunense**
136. Leaves basal and cauline, central segment thrice divided.
137. Stems retrorse-puberulous; leaf central segment cuneate-rhombic; bracteoles oblong, 9–12 mm long; sepals 15–18 mm long, spur 14–20 mm long 196. **D. taipaicum**
137. Stems spreading-hispid; leaf central segment rhombic; bracteoles linear, 7–8 mm long; sepals 10–14 mm long, spur 20–24 mm long 197. **D. pseudothibeticum**
126. Leaf segments dissected, with ultimate lobes lanceolate-linear, linear or narrow-linear.
138. Carpels 5.
139. Raceme rachis and pedicels retrorse-puberulous, lacking yellow glandular hairs; sepals 9 mm long, spur 12 mm long; staminode limbs at apex emarginate; carpels glabrous 202. **D. sinopentagynum**
139. Raceme rachis and pedicels with yellow glandular hairs; sepals 15 mm long, spur 20–24 mm long; staminode limbs at apex 2-lobulate; ovaries pubescent 203. **D. pseudomosoyense**
140. Raceme rachis and pedicels white-puberulous and yellow-glandular-puberulous; upper sepal outside below apex with a small horn-like projection, spur 20 mm long; petals at apex ciliate 203a. var. **pseudomosoyense**
140. Raceme rachis and pedicels only yellow-glandular -puberulous, lacking white hairs; upper sepal lacking horn-like projection, spur 21–24 mm long; petals glabrous 203b. var. **subglabrum**
138. Carpels 3.
141. Staminode limbs oblong or obovate-oblong.
142. Raceme rachis and pedicels glabrous.

143. Leaf ultimate lobes 6 mm broad; racemes 25–45 cm long; sepal spur 13–15 mm long; staminode limbs 4.6 mm long, 2-cleft 177. **D. pseudoyunnanense**
143. Leaf ultimate lobes 1.6–3 mm broad; racemes 10–20 cm long; sepal spur 25–28 mm long; staminode limbs 8 mm long, 2-lobulate 205. **D. leiostachyum**
142. Raceme rachis and pedicels hairy.
144. Raceme rachis and pedicels only white-puberulous; bracteoles remote from flower 208. **D. mosoyanense**
144. Raceme rachis and pedicels white-puberulous and yellow-glandular-puberulous; bracteoles contiguous to flower 204a. **D. thibeticum** var. **thibeticum**
141. Staminode limbs broad-obovate or suborbicular.
145. Stems and pedicels puberulous and glandular-puberulous.
146. Stems and pedicels densely spreading-white-puberulous and white-glandular-puberulous 211. **D. chefoense**
146. Stems and pedicels densely appressed-white-puberulous and spreading-yellow-puberulous.
147. Ovaries puberulous 209d. **D. grandiflorum** var. **glandulosum**
147. Carpels glabrous 209e. **D. grandiflorum** var. **leiocarpum**
145. Stems and pedicels only puberulous, not glandular-puberulous.
148. Raceme rachis and pedicels subglabrous or with very sparse hairs.
149. Stems glabrous or below sparsely hispid; sepals nearly as long as spur 207. **D. autumnale**
149. Stems with very sparse spreading hairs 206. **D. kamaonense**
150. Sepal spur slightly shorter than sepals, 12–16 mm long 206a. var. **kamaonense**
150. Sepal spur longer than sepals, 18–25 mm long 206b. var. **glabrescens**
148. Raceme rachis and pedicels with dense hairs 209. **D. grandiflorum**
151. Stems and pedicels only densely puberulous.
152. Ovaries densely appressed-puberulous 209a. var. **grandiflorum**
152. Carpels glabrous 209c. var. **deinocarpum**
151. Stems and pedicels densely appressed-puberulous, and with some spreading longer hairs 209b. var. **pilosum**
123. Inflorescences corymbose, or flowers solitary and terminal.
153. Carpels 5.
154. Sepals shorter than spur, lower sepal not, not corniculate; staminode limbs yellow-barbate.

155. Sepal spur subtubular.
156. Stems only white-puberulous, lacking yellow glandular hairs 212. **D. beesianum**
157. Leaf central segment and secondary lobes of lateral segments all with lobules.
158. Leaf ultimate lobes 2–3.5 mm broad 212a. var. **beesianum**
158. Leaf ultimate lobes 3–7 mm broad 212b. var. **latisectum**
157. Leaf central segment and secondary lobes of lateral segments all lacking lobules 212c. var. **radiatifolium**
156. Stems white-puberulous and yellow-glandular-puberulous 213d. **D. caeruleum** var. **crassicalcaratum**
155. Sepal spur subulate.
159. Leaf ultimate lobes 1.5–2.5(–4) mm broad; sepal spur at base 3 mm across; staminode limbs broad-obovate or suborbicular, at apex entire or emarginate 213. **D. caeruleum**
160. Stems and petioles appressed-puberulous.
161. Leaf blades up to 5 cm broad 213a. var. **caeruleum**
161. Leaf blades up to 12 cm broad 213c. var. **majus**
160. Stems and petioles spreading-puberulous 213b. var. **obtusilobum**
159. Leaf ultimate lobes 0.5–1.5 mm broad; sepal spur at base 2 mm across; staminode limbs white-barbate 215. **D. lagarocentrum**
154. Sepals nearly as long as spur; lower sepals near apex cymbiform, sometimes minutely 1-corniculate; staminode limbs white-barbate 214. **D. yongdengense**
153. Carpels 3.
162. Pedicels white-puberulous and yellow-glandular-puberulous.
163. Pedicels totally white-puberulous and yellow-glandular-puberulous; staminode limbs broad-obovate.
164. Herbs 30–80 cm tall; stems appressed-puberulous; corymbs 3-12-flowered; sepal spur 20–25 mm long 217. **D. tatsienense**
165. Leaf ultimate lobes 1.5–2.5(–4) mm broad; sepals inside glabrous 217a. var. **tatsienense**
165. Leaf ultimate lobes 0.5–1.5 mm broad; sepals inside with short hairs 217b. var. **chinghaiense**
164. Herbs 10–16.5 cm tall; stems spreading-puberulous; corymbs (1–)2(–3)-flowered; sepal spur 33–38 mm long 218. **D. pumilum**
163. Pedicels only on apex white-puberulous and yellow-glandular-puberulous, elsewhere glabrous; staminode limbs broad-oblong, 13 mm long 219. **D. grandilimum**
162. Pedicels lacking yellow glandular hairs.
166. Staminode claws narrow-cuneate, shorter than limbs and two times narrower than limbs 220. **D. pomeense**

166. Staminode claws slender, nearly as long as limbs and 5–6 times narrower than them.
167. Leaves basal and cauline.
168. Leaf blades weakly divided, with ultimate lobes triangular or narrow ovate; seeds ellipsoidal, with inconspicuous longitudinal edges and not winged 216. **D. davidii**
168. Leaf blades strongly divided, with segments dissected and ultimate lobes lanceolate-linear, linear or narrow-linear.
169. Herbs 90–100 cm tall; leaf ultimate lobes narrow-linear, 1.5–1.8 mm broad; corymbs 2–5-flowered 221. **D. pseudocaceruleum**
169. Herbs up to 22–40 cm tall.
170. Stems and pedicels spreading-puberulous; leaf ultimate lobes 3.5 mm broad; sepal spur 25 mm long; corymbs 2-flowered 222. **D. mollipilum**
170. Stems and pedicels appressed-puberulous.
171. Herbs 30–40 cm tall; flowers in 2–3-flowered corymbs.
172. Leaf blades up to 9.5 cm broad, lateral segments thrice dissected, with ultimate lobes 2.5–4 mm broad; staminode limbs at apex emarginate 209f. **D. grandiflorum** var. **fangshanense**
172. Leaf blades up to 5 cm broad, lateral segments once parted, with ultimate lobes 1–2 mm broad; staminode limbs at apex 2-lobulated ... 225. **D. lagarolobum**
171. Herbs 12–22 cm tall; flowers solitary and terminal; staminode limbs 2-cleft 226. **D. lihengianum**
167. Leaves all basal.
173. Scapes puberulous, on apex 1(–2)-flowered; sepals 16 mm long, spur 22–24 mm long; staminode limbs 2-lobed 223. **D. sinoscaposum**
173. Scapes hispid, on apex 1-flowered; sepals 23–24 mm long, spur 27 mm long; staminode limbs 2-parted slightly exceeding the middle of limb 224. **D. saxatile**
122. Seeds transversely striate or squamulose.
174. Seed subtetrahedral, transversely striate; leaf blades 3-parted to near base of blade; racemes subcorymbose, few-flowered 227. **D. tenii**
174. Seeds obovoid, transversely squamulose.
175. Herbs ca. 100 cm tall; stems glabrous; inflorescences subcorymbose, 2–3-flowered, pedicels glabrous; carpels glabrous 228. **D. shuichengense**
175. Herbs ca. 60 cm tall, appressed-puberulous; inflorescences corymbose 2-flowered, pedicels appressed-puberulous; ovaries puberulous 229. **D. maxinowiczii**