

# Flora of Japan *Arisaema* Key

Ohwi

1. Spadix-appendage filiform, long-exserted from the spathe
2. Normal leaves 2; spadex-appendage 10-15 cm long, 2.5-3.5 times as long as the spathe tube; terminal leaflet not longer than lateral ones *A. negishii*
2. Normal leaf solitary; spadix-appendage longer than 15 cm
3. Terminal leaflet much shorter than the adjacent lateral ones; pseudostem more than 40 cm long; spathe nearly green *A. heterophyllum*
3. Terminal leaflet as large or larger than adjacent lateral ones; pseudostem nearly wanting; spathe dark reddish purple
4. Spathe-blade with a T-shaped white mark inside; scape rising near base of petiole *A. kiushianum*
4. Spathe-blade without a T-shaped white mark inside; scape arising above base of petiole
5. Enlargement at base of spadix-appendage densely wrinkled *A. thunbergii*
5. Enlargement at the base of spadix-appendage smooth *A. urashima*
1. Spadix-appendage terete or clavate, obtuse or sometimes capitate at the apex, shorter than blade of the spathe
6. Spadix-appendage gradually passing into the floriferous part; spathe and spadix-appendage different in staminate and pistillate plants *A. heterocephalum*
6. Spadix-appendage truncate at base; spathe and spadix-appendage equal or nearly alike in staminate and pistillate plants
7. Spathe-blade saccate-galeate; leaflets always 3, filiform at apex, rather thick, lustrous above, entire *A. ringens*
7. Spathe-blade spreading, declined, or ascending anteriorly

- 8. Leaflets always 3, with many subtranslucent papillae on margin; spathe-blade acuminate *A. ternatipartitum*
- 8. Leaflets 3-15, pedate, margins entire or loosely undulate to toothed; spathe-blade gradually or abruptly acute
- 9. Normal leaf solitary (rarely 2)
- 10. Spadix-appendage rather stout, 3-10 mm across, terete, or gradually thickened toward apex; spathe-blade deltoid-ovate, 3-5 cm wide
- 11. Scape 3-10 cm long, apparently lateral; leaflets somewhat palmate, without a rachis; Kyushu. *A. nanum*
- 11. Scape 15-50 cm long.
- 12. Lateral leaflets 2 (-3) on each side, nearly radiate; rachis slightly developed
- 13. Spathe-blade obliquely ascending, 5-6 cm long *A. robustum*
- 13. Spathe-blade strongly declined over the spadix, 8-10 cm long *A. ovale*
- 12. Lateral leaflets 3-8 on each side; rachis, at least the lower part, well developed
- 14. Leaflets obovate, abruptly short-acuminate; habitat: Izu Peninsula *A. izuense*
- 14. Leaflets lanceolate to oblong-obovate, tapering toward apex; Kinki District and westward
- 15. Spathe-blade oblong-ovate, abruptly long-acuminate, strongly declined over spadix; spadix-appendage cylindric-clavate, slightly thickened at apex *A. suwoense*
- 15. Spathe-blade deltoid, abruptly narrowed from top of tubular part, erect, the apex gradually elongated to a linear tip; spadix-appendage narrowly cylindric terete *A. simense*

- 10. Spadix appendage thickened at both ends or at least at the base, the median and sometimes apical part narrow. 1-2 mm thick; spathe-blade broadly deltoid-lanceolate to narrowly deltoid-ovate, 2-3 cm wide; leaflets 7-19
- 16. Spathe entirely green, papillose on margin *A. yoshiokae*
- 16. Spathe usually purplish, entire
- 17. Spathe-blade 7-10 cm long
- 18. Leaflets 9-11; spathe-blade linear, ovate, gradually acuminate *A. iyoanum*
- 18. Leaflets 7-9
- 19. Spathe-blade ovate-lanceolate, long-acuminate, dark purple with 4 white stripes; Honshu (Harima Prov.) *A. seppikoense*
- 19. Spathe-blade oblong-lanceolate, subabruptly acute, light purple brown; Aki *A. akiense*
- 17. Spathe 3-6 cm long
- 20. Spathe-blade, at least in part, dark purple, 5-6 cm long, deltoid-lanceolate *A. monophyllum*
- 20. Spathe-blade greenish, ovate, 3-4 cm long *A. maximowiczii*
- 9. Normal leaves 2, rarely 1 in depauperate individuals
- 21. Leaflets 3-5; spathe-blade abruptly long-acuminate; spadix-appendage capitately thickened at apex *A. sikokianum*
- 21. Leaflets (5-)7-17; spadix-appendage cylindric, slender or cavately thickened at apex
- 22. Spathe-blade filiform-elongate
- 23. Spadix-appendage thick-cylindric; spathe-blade dark purple with

- vertical white stripes *A. kishidae*
- 23. Spadix-appendage clavate, thickened at the apex; spathe-blade green  
*A. tosaense*
- 22. Spathe-blade acuminate to long-acuminate, not filiforme-elongate
- 24. Spathe-blade broadly-lanceolate, gradually long-acuminate;  
spadix-appendage slenderly cylindric
- 25. Spathe-blade bent forward horizontally *A. longilaminum*
- 25. Spathe-blade declined and arching over the spadix
- 26. Spadix-appendage erect *A. angustifoliatum*
- 26. Spadix-appendage slightly bent forward *A. shinanoense*
- 24. Spathe-blade narrowly to broadly ovate
- 27. Spathe-blade densely yellowish papillose inside *A. yamatense*
- 27. Spathe-blade smooth inside
- 28. Spathe-blade obliquely ascending or bent horizontally, abruptly  
short-acute
- 29. Plant loosely tufted with numerous young plants; spathe-blade  
oval to orbicular-ovate *A. proliferum*
- 29. Plant solitary; spathe-blade ovate
- 30. Spadix-appendage thick clavate *A. speirophyllum*
- 30. Spadix-appendage linear or cylindric *A. peninsulae*
- 28. Spathe-blade declined above; long-acuminate
- 31. Spathe-blade oblong-deltoid, tapering from base;  
spadix-appendage cylindric, the apex as broad as the other

part

- 32. Spadix-appendage slenderly cylindric or linear
  - 33. Spadix-appendage linear; spathe-blade obliquely declined only at tip; leaflets 9-18, often serrulate; Honshu *A. angustatum*
  - 33. Spadix-appendage cylindric; spathe-blade declined; leaflets 11-13 in the lower one, entire; Kyushu *A. koshikiense*
  - 32. Spadix-appendage cylindric, rather thick, to 8 mm across at the base; tubular part of the spathe rather Aong *A. glenochlamys*
- 31. Spathe-blade broadly ovate to ovate-lanceolate, tapering from below the middle but not from the base
  - 34. Leaflets palmate on the scarcely developed rachis; scape longer than the leaves
    - 35. Leaflets 5 *A. nikkoense*
    - 35. Leaflets more than 5
      - 36. Leaflets 5-7, not variegated, narrowly oblong, entire or serrate; spathe auricles very distinct *A. stenophyllum*
      - 36. Leaflets 8-14, with a broad white line along the midrib, linear-lanceolate, always undulate on the margin; spathe auricles narrow and rather inconspicuous *A. undulatifolium*
  - 34. Leaflets pedate on the well-developed rachis at least between the lower ones
    - 37. Spathe-blade broadly deltoid-ovate, the rachis of leaflets spirally curved on the apical part, the auricles almost wanting *A. takedae*
    - 37. Spathe-blade narrower, gradually tapering toward both ends from the middle, the auricles developed

- 38. Auricles of the spathe very broad; Kanto to Oshima in Izu  
Province *A. limbatum*
- 38. Auricles of spathe narrow
- 39. Spadix-appendage bulbously thickened at apex, smooth  
or rugose
- 40. Spathe-blade elongate, nearly as long as the tubular  
part, spreading nearly at a right angle over the mouth;  
Kyushu *A. mayebarae*
- 40. Spathe-blade always shorter than the tubular part,  
strongly declined at the tip over the mouth; eastern  
Honshu *A. serratum*
- 39. Spadix-appendage slightly or scarcely thickened, smooth
- 41. Tuber globose, not depressed; Izu Islands *A. hachijoense*
- 41. Tuber depressed-globose; western Honshu *A. japonicum*