

## Key to the Species, Subspecies, and Varieties of *Balanophora* (Hansen 1972)

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1. ♀- and ♂-flowers in different inflorescences.....6
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2. ♂ -flowers separated from ♀ -flowers .....3
3. ♂ -flowers above ♀ -flowers only ..... 8. *B. wilderi*, p. 138
3. ♂ -flowers below ♀ -flowers, rarely also above ..... 4
4. ♂ -flowers mostly 3-merous, anthers transversally opening, leaves more or less connate in one whorl at the middle of the stem ..... 12. *B. involucrata*, p. 152
4. ♂ -flowers 4-5-merous, anthers longitudinally opening, leaves otherwise arranged.....5
5. Leaves distichous, ♂ -flowers sessile ..... 7. *B. abbreviata*, p. 134
5. Leaves spirally arranged, rarely opposite, ♂ -flowers pedicellate 1. *B. fungosa* ssp. *fungosa*, p. 98
6. ♂ -specimens only (Note: flowers at proximal and distal parts of inflorescence often not typically developed) .....7
6. ♀ -specimens only (Note: in some cases difficult to key out properly) ..... 17
7. ♂ -flowers mostly 3-merous; anthers 3, transversally opening .....8
7. ♂ -flowers 4-6 (-14)-merous; anthers united into a conspicuous synandrium, cells longitudinally opening, in some species many times transversally divided .....9
8. Leaves verticillate in one whorl and more or less connate..... 12. *B. involucrata*, p. 152
8. Leaves opposite, decussate, rarely spirally arranged, never verticillate 14. *B. harlandii*, p. 157
9. ♂ -flowers actinomorphic, 4- or 5-merous, rarely 3- or 6-merous; tepals all acute ..... 10
9. ♂ -flowers zygomorphic, 4- or 6-merous, rarely 5- or 7-14-merous; lateral tepals narrow, acute, median tepals wide, truncate ..... 11
10. Tepals lanceolate; synandrium slightly obconical and somewhat compressed in anterior-posterior direction; leaves always spirally arranged.....1. *B. fungosa* ssp. *indica*, p. 100
10. Tepals ovate; synandrium hemispherical; leaves distichous or sometimes apparently spirally arranged..... 2. *B. dioica*, p. 111
11. ♂ -flowers normally 6-merous with 2 wide, almost square, truncate median tepals and 4 narrow, ovate acute lateral tepals; sometimes 5- or 7-8-merous ..... 11. *B. laxiflora*, p. 148
11. ♂ -flowers normally 4-merous with 2 wide, truncate median tepals and 2 narrow, acute lateral tepals..... 12
12. Pedicels 14-18 mm, during anthesis much reflexed; lateral tepals extremely narrow and acute, median tepals very wide, square, truncate; synandrium completely compressed in anterior-posterior direction ..... 6. *B. reflexa*, p. 130
12. Pedicels absent or at most up to 6 mm ..... 13
13. Anther cells always many times transversally divided into numerous locelli, each being about 2 times longer than wide ..... 10. *B. polyandra*, p. 145
13. Anther cells many times longer than wide, reaching from base to top of synandrium..... 14
14. Leaves always distichous.....9. *B. latisejala*, p. 140
14. Leaves spirally arranged or opposite, decussate ..... 15
15. Leaves spirally arranged, gradually increasing in size upwards on the stem, the upper ones elliptic, concealing inflorescence during anthesis; tuber elongated and regularly branched ..... 3. *B. elongata*, p. 114
15. Leaves opposite, decussate ..... 16
16. Leaves in 6-8 pairs, gradually increasing in size upwards on the stem, the uppermost ones

almost circular in outline, cucullate, completely concealing the inflorescence during anthesis; tuber spherical, not branched.....	5. <i>B. lowii</i> , p. 127
16. Leaves in 2-3 (-5) pairs, all of nearly the same size; in case of 4 leaves only, the two pairs often very close to each other, apparently whorled, patent during anthesis; tubers mostly somewhat branched, with slightly elongated parts .....	4. <i>B. papuana</i> , p. 121
17. Leaves whorled or opposite and decussate.....	18
17. Leaves distichous or spirally arranged .....	25
18. Leaves whorled .....	19
18. Leaves opposite and decussate.....	20
19. Leaves 3 in a whorl about the middle of the stem, more or less connate.....	12. <i>B. involucrata</i> , p. 152
19. Leaves 4, distinct, apparently whorled at the upper part of the stem .....	4. <i>B. papuana</i> , p. 121
20. Leaves gradually increasing in size upwards on the stem; the uppermost leaves almost circular, cucullate, concealing the flowering inflorescence .....	5. <i>B. lowii</i> , p. 127
20. Leaves almost equal in size except for the lowermost 1-3 pairs .....	21
21. ♀ flowers on main axis of inflorescence, never on the spadicles .....	22
21. ♀ flowers on the main axis of inflorescence as well as on the lower part of spadicles.....	23
22. Greatest width of spadicles 1/2 the length or more; ♀ -inflorescence mostly long ellipsoid; found in Japan only; ♂ -inflorescences never observed, probably apomict .....	15. <i>B. japonica</i> , p. 160
22. Greatest width of spadicles 1/3-1/4 or in rare cases up to 1/2 the length; ♀ -inflorescence mostly spherical, ovoid or short-ellipsoid; found in Assam-Thailand-China- Taiwan; ♂ inflorescences mostly present .....	14. <i>B. harlandii</i> , p. 157
23. ♀ inflorescence slightly obovoid; spadicles long ♀ obconical with a few flowers in lower part; top cells of spadicles with very large cuticular ridges, 5-10 μ high .....	4. <i>B. papuana</i> , p. 121
23. ♀ inflorescence ovoid or long-ellipsoid; spadicles cylindrical in lower half or more, top part ± abruptly widened; top cells with small, inconspicuous cuticular ridges 0.5-1.5 μ high or ridges absent.....	24
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30. Greatest width of spadicles 1/4-1/3 or in rare cases up to 1/2 the length; ♀ -inflorescence mostly spherical, ovoid or short-ellipsoid; found in Assam-Thailand-China-Taiwan; ♂ -	

inflorescences mostly present .....	14. <i>B. harlandii</i> , p. 157
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33. ♀ -inflorescence subspherical, markedly depressed, leaves smooth; Java only .....	1. <i>B. fungosa</i> ssp. <i>indica</i> var. <i>globosa</i> , p. 109
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35. ♀ -inflorescence depressed-spherical, spherical, obovoid, ellipsoid; basal flowers with style (3.5-) 4-5 times longer than ovary .....	1. <i>B. fungosa</i> ssp. <i>indica</i> , p. 100