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Rancho Santa Ana Botanic Garden

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THE STATUS OF PARDANTHOPSIS (IRIDACEAE)

LEE W. LENZ

Rancho Santa Ana Botanic Garden
Claremont, California 91711

*Iris dichotoma* Pall. is widely distributed in Asia, extending from Inkutsk and Transbaikalia through Manchuria into northern China and as far south as Shensi, Shantung and Kiangsu provinces (Dykes, 1913). The species was originally described by Pallas (1776) and was placed by him in the genus *Iris*. Ledebour (1853), believing it to be congeneric with *Pardanthus chinensis* Ker-Gaw., made the combination *Pardanthus dichotomus*. In 1873, Decaisne placed it in *Evansia* Salisb. along with *Evansia fimbriata* (Vent.) Decne. and *E. vespertina* Decne. Baker (1892) assigned it to *Iris*, subgenus *Pardanthopsis* (Hance) Baker, together with *I. verna* L., *I. wattii* Baker and *I. yedoensis* Franch et Savat. Dykes (1913) placed it by itself in *Iris*, section *Pardanthopsis*, as did Diels (1930, p. 502). Lawrence (1953) put it in subsection *Pardanthopsis* (Hance) Lawr. of the section *Pogiris* Tauch. Rodinonenko (1961), following Baker, placed it in the subgenus *Pardanthopsis* (Hance) Baker. Regardless of its infrageneric position, all recent taxonomists recognize *Iris dichotoma* as distinct and the only member of whichever infrageneric category in which it is placed. Except for Ledebour (1853, p. 106) and Decaisne (1873) no one has suggested that *I. dichotoma* be removed from the genus *Iris* and Lawrence (1953) goes so far as to say that "the presence of standards and falls and the petaloid style-branches place it unequivocally in *Iris*." The terms 'standards' and 'falls' are merely those commonly used by horticulturists in describing iris sepalas and petals. There is no single feature about those parts which set them apart from sepalas and petals in other groups. Lawrence quite correctly noted that the subsection *Pardanthopsis* with its single species "is distinguished from other members of the subgenus [or for that matter any other member of the genus] by the several-times dichotomously branched multiflowered dichasial inflorescence . . . by the seed with a large pinkish terminal aril, and by the perianth tightly contorted after anthesis." There are, however, other features by which *Iris dichotoma* can be shown to differ from all other members of the genus and it seems that a reevaluation of its generic position is called for.

In a number of respects *Iris dichotoma* approaches *Belamcanda* more than *Iris* in its morphological features which can be compared as follows:

[401]
<table>
<thead>
<tr>
<th><strong>Iris</strong></th>
<th><strong>Iris dichotoma</strong></th>
<th><strong>Belamcanda</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>1. After anthesis flower parts assume no regular arrangement.</td>
<td>After anthesis flower parts assume a tightly spiraled arrangement.</td>
<td>After anthesis flower parts assume a tightly spiraled arrangement.</td>
</tr>
<tr>
<td>2. If articulated then above the ovary.</td>
<td>Articulation below the ovary.</td>
<td>Articulation below the ovary.</td>
</tr>
<tr>
<td>4. Flowers remain open more than one day.</td>
<td>Flowers open in the evening and close by early morning.</td>
<td>Flowers open in the morning and close by late afternoon.</td>
</tr>
<tr>
<td>6. Inflorescence one to many flowered; unbranched to a raceme with several branches.</td>
<td>Several-times-dichotomously branched; multiflowered dichasial inflorescence.</td>
<td>Lax corymbose multiflowered raceme.</td>
</tr>
<tr>
<td>7. Style branches large, petaloid, divided nearly to the base; each style branch with a stigmatic flap on underside and with two style crests above.</td>
<td>Style branches narrow, slightly winged, divided nearly to the base; each style branch with a stigmatic flap on lower side and with two style crests above.</td>
<td>Style branches not petaloid or winged, divided about 1/3 the length of the style; tip of each division divided into three parts, outer ones rolled inward, center one forming a lip-like flap, all three parts stigmatic.</td>
</tr>
<tr>
<td>8. Stamens held firmly against the underside of the style branch.</td>
<td>Stamens held firmly against the underside of the style branch.</td>
<td>Stamens free, not held against the style.</td>
</tr>
<tr>
<td>9. Sepals geniculate, with a distinct claw and blade.</td>
<td>Sepals geniculate, with a distinct claw and blade.</td>
<td>Sepals not geniculate or separated into a claw and blade.</td>
</tr>
<tr>
<td>10. Hybrids with Iris dichotoma unknown.</td>
<td>Not known to hybridize with other species of Iris, but hybridizes with Belamcanda chinensis (L.) DC. and the hybrids are fertile with segregation in the F2 generation.</td>
<td>Hybridsizes with Iris dichotoma.</td>
</tr>
</tbody>
</table>

An examination of the above tabulation shows that *I. dichotoma*, which has no close relatives in *Iris*, differs from other members of that genus by (1) arrangement of floral parts following anthesis, (2) articulation below ovary, (3) absence of a perianth tube, (4) the ephemeral nature of the flowers, (5) type of branching and (6) season of bloom. It differs from *Belamcanda* by (1) having geniculate sepals, (2) the structure of the style branches and (3) the position of the stamens. In its morphological characters *Iris dichotoma* is intermediate in features which characterize *Iris* and *Belamcanda* and its intermediate nature may best be recognized by according it generic status.
Article 60 of the *International Code of Botanical Nomenclature* states that, "When the rank of a genus or infrageneric taxon is changed, the correct name or epithet is the earliest legitimate one available in the new rank." Except for *Iris*, the only generic names which have been applied to our plant are *Pardanthus* Ker-Gaw. and *Evansia* Salisb. *Pardanthus* Ker-Gaw. is a later synonym of *Belamcanda* Adanson and *Evansia* Salisb. is a *nomen illegit.* (Lawrence, 1953). Except for Ledebour and Decaisne, other taxonomists, while often disagreeing on the level of the infrageneric category into which *I. dichotoma* should be placed, have been unanimous in using the name *Pardanthopsis* created by Hance (1875) for the section of *Iris* containing *I. dichotoma*. Since no other species have been associated with the name *Pardanthopsis*, I propose to raise it to the rank of genus.

**Pardanthopsis** Lenz, stat. nov.


**Type species:** *Iris dichotoma* Pallas.

**Pardanthopsis dichotoma** (Pallas) Lenz, comb. nov.


**LITERATURE CITED**


