STUDIES ON THE FLORA OF THE GUIANAS 4
A NEW SPECIES OF APINAGIA (PODOSTEMONACEAE) AND A KEY TO THE APINAGIA SPECIES IN SURINAME

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During a study of the Podostemonaceae for the Flora of Suriname a specimen of *Apinagia* was found which could not be placed in one of the species recognized by van Royen (1951, 1953, 1954). The specimen forms part of a mixed collection mainly consisting of *Mourera fluviatilis* Aubl. but also containing a specimen of *Apinagia longifolia* (Tul.) van Royen (sub Irwin et al. 55346A in K and NY).

*Apinagia petiolata* den Hollander spec. nov.

Herb ad circ. 30 cm alta, caule ramisque distinctis. Lamina elliptica, ad 16 × 4 cm, pinnatifida, petiolo ad 3 cm longo. Pedicellus fructifer ad 4 cm longus; spatella ad 1.5 cm longa; tepala 6 ad 9; stamina 6 ad 10, sicut tepala in verticillo completo posita.

Plant up to 30 cm high, with distinct stem and relatively short lateral branches; internodes terete or slightly winged, 0.5–3 cm long, 0.4–1 cm in diameter. Leaves in outline more or less distinctly elliptic, up to 16 cm long, up to 4 cm wide, membranaceous, pinnatifida, lobes triangular to rectangular; base cuneate, with a distinct up to 3 cm long petiole; venation pinnate, main veins prominent beneath; upper surface, especially in young leaves, with numerous tufts of up to c. 5 mm long fili. Flowers pale pink, in axillary, extra-axillary or terminal inflorescences; pedicels up to c. 4 cm long, slightly winged; spatella up to c. 1.5 cm long, thus enveloping the pedicel for less than half of its length; tepals 6–9, in a complete whorl, lanceolate, up to c. 0.7 mm long, acute; stamens 6–10, in a complete whorl, filaments up to c. 5.5 mm long, anthers up to c. 2 mm long, introrse, thecae obtuse at base and apex; ovary ellipsoid, c. 3 × 2 mm, styles filiform, up to 1.5 mm long, basally connate; valves of the fruit with 3 ribs, the middle one extending to the apex, the two others shorter.

**Typus:** *Irwin et al. 55346B*, Suriname, Lucie River, 2 km below the confluence of the Oost River, 3 Sep 1963 (NY).

The new species appears to be related to *Apinagia longifolia* (Tul.) van Royen. The differences between the two species are given in table 1.

The species of *Apinagia* currently known from Suriname may be keyed out as follows:
Table 1. Main differences between *Apinagia petiolata* and *Apinagia longifolia*.

<table>
<thead>
<tr>
<th></th>
<th><em>A. petiolata</em></th>
<th><em>A. longifolia</em></th>
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<tbody>
<tr>
<td>Leaf</td>
<td>up to 16 × 4 cm, elliptic</td>
<td>up to 35 × 5 cm, elliptic to rhombiform</td>
</tr>
<tr>
<td>Petiole</td>
<td>up to 3 cm long</td>
<td>absent or up to 1.5 cm long</td>
</tr>
<tr>
<td>Pedicel</td>
<td>up to 4 cm long</td>
<td>up to 8 cm long</td>
</tr>
<tr>
<td>Spathella</td>
<td>up to 1.5 cm long</td>
<td>up to 2.5 cm long</td>
</tr>
<tr>
<td>Tepals</td>
<td>6–9</td>
<td>10–17</td>
</tr>
<tr>
<td>Stamens</td>
<td>6–10, normally 8–9</td>
<td>10–30, normally more than 12</td>
</tr>
</tbody>
</table>

KEY TO THE SPECIES OF APINAGIA OF SURINAME

1.a. Ovary (in well-developed flowers) shortly stipitate . *A. divertens* Went
b. Ovary not stipitate ........................................... 2

2.a. Lamina in outline narrowly elliptic to elliptic, at least the lower part entire to faintly pinnatifid, or leaves absent and plant thalloid ........... 3
b. Lamina in outline subrectangular, subrhombiform, subtriangular, or if narrowly elliptic to elliptic, then in the lower part distinctly lobed or incised ........................................... 9

3.a. Leaves absent, or if present, then up to c. 4 mm long; plant thalloid ........................................... 1
b. Leaves present and longer than 1 cm .................................. 4

4.a. Leaves without a distinct marginal vein .................................. 5
b. Leaves with a distinct marginal vein, apex acute or with a few falcate segments, tufts of siliques lacking, or if present, then scattered over the leaf . *A. treslingiana* (Went) van Royen

5.a. Leaf apex of at least some of the apical leaves divided into narrow segments, tufts of siliques mostly present, arranged in two or more or less distinct rows ........................................... *A. staheliana* (Went) van Royen
b. Leaf apex entire, tufts of siliques, if present, scattered over the leaf . 6

6.a. Leaves at least in the upper part distinctly pinnatifid to pinnatisect . ........................................... 7
b. Leaves in the upper part entire to sinuate .................................. 8

7.a. Stamens 6–10; pedicel up to c. 4 cm long; petiole up to c. 3 cm long . . *A. petiolata* den Hollander
b. Stamens 10–30; pedicel up to 8 cm long; lamina sessile or with a petiole up to c. 1.5 cm long . . . *A. longifolia* (Tul.) van Royen

8.a. Flowers solitary, mainly terminal . . . *A. hulkiana* (Went) van Royen
b. Flowers in branched inflorescences . . . *A. flexuosa* (Tul.) van Royen

9.a. Lamina, or at least its lobes and/or their apices, divided into many filiform or narrowly vittiform segments ........................................... 10
b. Lamina, its lobes, and their apices normally not divided into filiform or narrowly vittiform segments, occasionally the lobes or their apices falcate ........................................... 19
10. a. The whole lamina divided into filiform to narrowly vittiform segments

b. Lamina with primary divisions thalloid, filiform to narrowly vittiform segments only at the apices of the primary divisions

11. a. Lamina repeatedly furcate

b. Lamina basically pinnately incised

12. a. Valves of the fruit with 3 distinct, long ribs and thickened margins .

b. Valves of the fruit without or with 3 short ribs

13. a. Pinnae of the lamina repeatedly furcate, segments filiform

b. Pinnae of the lamina vittiform, at the apices with filiform segments

14. a. Tufts of fila mostly present, arranged in two more or less distinct rows, stamens c. 8–25 (or more?)

b. Tufts of fila lacking, or if present, then scattered over the leaf; stamens at most 12

15. a. Internodes c. 0.5–3.5 cm long

b. Internodes up to 0.5 cm long

16. a. Stamens c. 8–12

b. Stamens c. 2–7

17. a. Tepals c. 8–19

b. Tepals c. 2–6

18. a. Filaments of the stamens becoming more than twice as long as the ovary

b. Filaments of the stamens becoming less than twice as long as the ovary

19. a. Filaments of the stamens becoming more than twice as long as the ovary

b. Filaments of the stamens becoming less than twice as long as the ovary

20. a. Stamens c. 2–12

b. Stamens at least 10, in most flowers more than 12

Note: *A. nana* is regarded as distinct from *A. pilgeri* Mildbraed (cf. van Royen, 1951)

ACKNOWLEDGEMENTS
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Fig. 1. *Apinagia petiolata*. a. habit; b. flower (from Irwin et al 55346B).

REFERENCES