

IS XYRIS AMERICANA AUBL. AN ABOLDODA?

by

J. LANJOUW (UTRECHT).

In Rep. spec. nov. regni veget. XLIV (1938) p. 33 K. S u e s s e n g u t h censures my commentary on *Abolboda* (cf. Rec. trav. bot. néerl. XXXIV, p. 492). As I can not admit the correctness of the criticism a short reply may be permitted.

On p. 492 of my paper arguments have been given tending to prove first that *Xyris americana* Aubl. does not belong to *Xyris* but to *Abolboda*, and secondly that it is conspecific with *Abolboda Poeppigii* Kunth. Now S u e s s e n g u t h writes: „L a n j o u w nimmt in Gegensatz zu S u e s s e n g u t h und B e y e r l e sowie den früheren Autoren an, das *Xyris americana* Aubl. dasselbe sei, wie *Abolboda Poeppigii* Kunth." This suggests that I am the only botanist by whom Aublet's species has been put in the genus *Abolboda* and who has advocated its identity with *Abolboda Poeppigii* Kunth. M a l m e, who has spent a great deal of his life on the *Xyridaceae*, however, was already convinced that it belongs to the genus *Abolboda*, and that the species is identical with *Abolboda Poeppigii* Kunth had been suggested by H e i m e r l. This has been pointed out in my paper and I can not understand, therefore, why S u e s s e n g u t h writes „in Gegensatz zu den früheren Autoren".

S u e s s e n g u t h continues: „Diese Annahme geht indes nicht auf eine Untersuchung des Original exemplars in British Museum zurück." S u e s s e n g u t h must have read my paper in a rather careless way, as I did all I could to get reliable information regarding the type of A u b l e t. I stated in my paper: „I have not seen A u b l e t s plants, but I have sent one of my Suriname specimens,

which are identical with *Abolboda Poeppigii* Kunth, to Mr. Exell at the British Museum (Natural History). Mr. Exell wrote to me that the specimens agree very well with *Aublets* type." I can not afford to go to London for a single specimen, and I wrote therefore to Mr. Exell, one of the members of the botanical staff of the Museum, who readily agreed to study this plant for me. Mr. Exell's exact words I will cite here from his letter of Sept. 12, 1936: „Your spec. no. 294 seems to me to agree very well with *Aublets* type of *Xyris americana*. The specimen of the latter is rather poor, but it seems to me that it has only 2 sepals. Our specimen of *A. Poeppigii* seems also to be the same, though the peduncle is much shorter (probably younger).” There can be no doubt therefore that the type has been studied.

In the next paragraph S u e s s e n g u t h writes: „L a n j o u w's *Abolboda americana* ist zu bezeichnen als *A. am. Lanjouw*, non *Aublet*, gehört aber zu *Xyris*.” The first part of this sentence should have been expressed in this way: *A. americana* Lanjouw, excl. syn. *X. americana* Aubl. The additional note, „gehört aber zu *Xyris*”, means apparently that the specimens described and cited by me, do not belong to *Abolboda* but to *Xyris*. If S u e s s e n g u t h had taken the trouble to study the specimens investigated by me, he would have seen that they indubitably belong to *Abolboda*.

Finally S u e s s e n g u t h sets forth why in his opinion *Aublet's* species should belong to *Xyris*. It is necessary, however, to point out that he did not study *Aublet's* type, and that he neglected to obtain first hand information regarding this specimen. His remarks therefore are based on data gathered from the literature only. His first statement is: „Nach *Aublet* besitzt seine *Xyris americana* drei Kelchblätter. Auch auf der Tafel 14 sind ganz deutlich drei solche Organe gezeichnet.” My objections to these arguments are: Mr. Exell saw in *Aublet's* type only 2 sepals. It is quite possible that the flower of *A. Poeppigii* (= *americana*) possesses 3 sepals; in those species where a third sepal is known to be present, it is often lacking in herbarium specimens, because it disappears, as a rule, very soon. The third

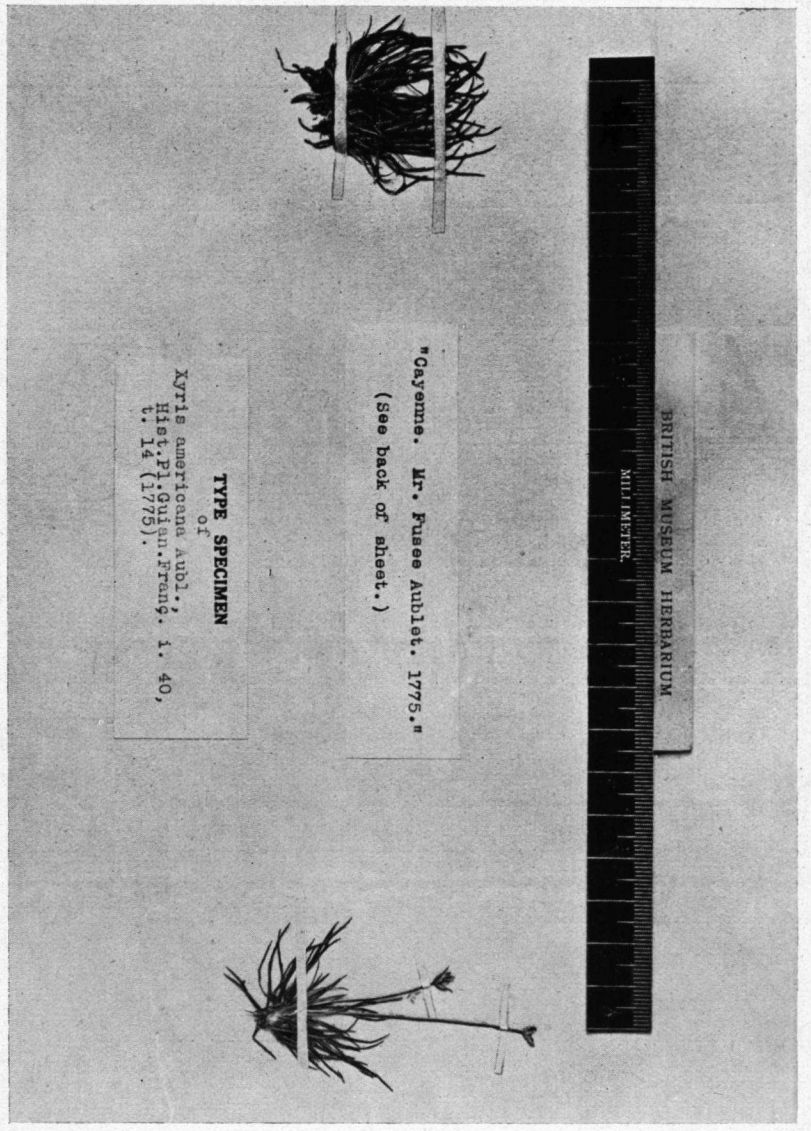
sepal of the rather common *A. grandis* Griseb. for instance, was discovered but a short time ago by me in the flowers of Suriname specimens. Though I have not seen the third sepal in any of my specimens of *A. americana*, it is not unthinkable that it may have been observed by Aublet. As Malmé (Ark. f. Botanik 13, No. 3, p. 51) states: the sepals described and figured by Aublet are, however, true *Abolboda* sepals. Aublet described all three sepals as „vertes, membraneuses, droites, aiguës”. In *Xyris* they are never green. The third sepal in *Xyris* is always very thin and hoodlike, in bud it envelops the corolla, but it disappears very soon! Aublet's figure shows three identical sepals, exactly like those of *Abolboda*. In my opinion Aublet may have mistaken a bract for a sepal, as the sepals and bracts of *Abolboda Poeppigii* (= *americana*) are very similar. Than Süssenguth goes on: „Ferner sagt Aublet vom Griffel seiner *Xyris americana* — à la moitié de sa hauteur, se partage en trois branches terminées chacune par trois stigmates aplatis — und bildet dies auch genau ab. So etwas gibt es aber bei *Abolboda* nicht; bei *Abolboda Poeppigii* besonders ist von einer derartigen Bildung gar keine Rede; dagegen kommen ähnliche Griffelbildungen bei *Xyris* vor”. It is rather curious that Malmé (quoted above), by whom more *Xyris* species have been studied than by any other botanist, cites the same lines of Aublet, but draws this conclusion: „was auf *Abolboda* hinzuweisen scheint”. I do not think that one can form a good idea of the style of this plant from Aublet's scanty description and his rather childish figure, though with Malmé I am of opinion that they are more in favour of the assumption that the plant is an *Abolboda*. Aublet states moreover that the flowers are blue (this remark has also been cited by Malmé!). This is also a strong point in favour of *Abolboda*. All species (except one) of the latter genus have blue flowers, whereas those of *Xyris* may be either yellow or, rarely, white, but they are never blue. This point has been overlooked by Süssenguth. The habit and the kind of spike shown in Aublet's figure (see also the photograph of the type specimen, fig. 1) are in my opinion also convincing proof that the plant is an *Abolboda*, as plants with

a similar habit and with this kind of spike do not occur in other genera.

I believe that I have proved now convincingly: first that S u e s s e n g u t h's conclusion, „Xyris americana Aubl. ist also tatsächlich eine Xyris-Art und keine Abolboda”, is unacceptable and secondly that this species indubitably belongs to the genus *Abolboda* and that it is conspecific or at least very closely related to *A. Poeppigii* Kunth.

In the next paragraph S u e s s e n g u t h criticizes my remarks on *Abolboda grandis* Griseb. The styles of the species of *Abolboda* possess at some distance from the base pendulous and more or less filiform appendages, which in some species are thickened towards the top. S u e s s e n g u t h and B e y e r l e have used this feature in their key to the species of *Abolboda*. I wrote: „The appendages of the style are not always filiform as is said by S u e s s e n g u t h and B e y e r l e, but sometimes they are thickened towards the base”. The latter words „towards the base” is a slip of the pen, and instead of this, one should read „towards the top”. I am very sorry that this mistake has crept in, but as the appendages are never thickened towards the top and moreover as it was a critical remark on the key made by S u e s s e n g u t h and B e y e r l e, I think it was evident that the reverse was meant. In the specimen figured by me the appendages are of the ordinary filiform type. As one may find both forms (filiform and thickened towards the top) on the same specimen, the character appeared to me useless for discriminating between the species, and I still maintain that the differences given by M a l m e are more reliable. It is true that one species, namely *A. macrostachya* was put by M a l m e in the wrong place, because in that species the third sepal was overlooked by him. How easily this may happen, follows from the fact that S u e s s e n g u t h made a similar mistake with regard to *A. grandis* Griseb.

Utrecht, March 1939.



BRITISH MUSEUM HERBARIUM

MILLIMETER

"Gayenne. Mr. Fusée Aublet. 1775."
(See back of sheet.)

TYPE SPECIMEN
of
Xyris americana Aubl.,
Hist. Pl. Guayan. Franç. 1. 40,
t. 14 (1775).

Fig. 1. *Abolboda americana* (Aubl.) Lanj. Type specimen!