IS XYRIS AMERICANA AUBL. AN ABOLDODA?

by

J. LANJOUW (UTRECHT).

In Rep. spec. nov. regni veget. XLIV (1938) p. 33 K. Suessenguth 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 Suessenguth writes: „Lanjouw nimmt in Gegensatz zu Suessenguth und Beverl es 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. Malme, 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 Heimerl. This has been pointed out in my paper and I can not understand, therefore, why Suessenguth writes „in Gegensatz zu den früheren Autoren”.

Suessenguth continues: „Diese Annahme geht indes nicht auf eine Untersuchung des Orinalexemplars in British Museum zurück.” Suessenguth must have read my paper in a rather careless way, as I did all I could to get reliable information regarding the type of Aublet. I stated in my paper: „I have not seen Aublet’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 Aublet's 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 Aublet's 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 Suessenguth writes: „Lanjouw'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 Suessenguth had taken the trouble to study the specimens investigated by me, he would have seen that they indubitably belong to Abolboda.

Finally Suessenguth 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 Malme (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 Suessenguth 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 applatis — 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 Malme (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 Malme 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 Malme!). 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 Suessenguth. 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 Suessenguth's conclusion, "Xyris americana Aubl. ist also tatsäglich 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 Suessenguth 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. Suessenguth and Beyerle 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 Suessenguth and Beyerle, 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 Suessenguth and Beyerle, 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 Malme are more reliable. It is true that one species, namely A. macrostachya was put by Malme 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 Suessenguth made a similar mistake with regard to A. grandis Griseb.

Utrecht, March 1939.
Fig. 1. Abolboda americana (Aubl.) Lan., Type specimen.