III. A Determination of Three British Species of Juncus, with jointed Leaves. By the Rev. Hugh Davies, F.L.S.

Read November 1, 1808.
$I_{N}$ the course of a morning's walk having been fortunate in an opportunity of examining the knotty-leaved division of the genus Juncus, by finding all the species on nearly the same spot, I am induced to request leave to lay before the Linnean Society the result of my observations.

Here then I must premise, that the want of an opportunity of examining them in a proper state, and comparing them together, I take to have been the cause that what seem to me to be distinct species have been treated as varieties only, by men of eminence in the science of botany.

In consequence of the attention which I bestowed on them, I am'much inclined to suppose that I can determine into three very distinct species, what have been deemed two varieties only of the species J. articulatus, Linn. Sp. Pl., Sm. Fl. Brit., and Leers Fl. Herborn.; but are considered as two species, indeed, by Dr. Sibthorp, viz. compressus and nemorosus; and two species, likewise, by Mr. Relhan, viz. compressus and articulatus.

My three species I shall at present distinguish as first, seCOND, and third.

In the first the branches of the panicle are strong, erect, fewer, and less diffuse than in the other two; the capsule is large, of a deep reddish brown colour, and finely glossed; of

## Mr. Davies's Determination of Three British Species of Juncus. 11

an oval triangular shape, terminated by a short blunt point; the stalk of 4-6 joints.

This is Juncus articulatus, Fl. Brit., Fl. Herborn.; and compressus of Sibthorp and Relhan. Moris. s. 8. t. 9. f. 2. Scheuchz. 3S1. 1. R. Syn. 433. 8. but I cannot refer to the Sp. Pl., where the definition is petalis obtusis.

In the second the panicle is more branched, the branches more slender, and spreading, the divisions of the calyx narrower and longer, the capsule smaller, much more taper-pointed, and lighter-coloured; culm of fewer joints, that, and the leaves, less compressed. It is a taller plant, sometimes above three feet high, and it ripens later.

This I take to be Moris. s. 8. t. 9. f. 1. certainly Scheuchzer, p. 334. 4. who says: "Calami tribus quatuorve communiter geniculis distincti,-Flosculi nunc dilutiùs nunc obscuriùs fusci aut spadicei,-Vasculum seminale triquetrum, in acutum mucronem terminatum." It is likewise J. articulatus of Relhan; and nemorosus of Sibthorp.

My third differs from both the former in several particulars: -The panicle is much lighter-coloured; the peduncles, which are divaricated, and even bent back, are evidently thicker than those of the sECOND, the panicle of which resembles this more than that of the first. Then the smallest capsule of this;-the pale-coloured bunches of florets,-and particularly the elliptic obtuse segments of the calyx, with a broad scariose margin, fully distinguish it from the other two. It is, besides, a firmer plant, the nodes in the leaves being scarcely perceptible without a considerable degree of pressure; -the culm and leaf are quite round, and it never has more than two joints in the stalk!

I find no description of this species besides the short one in Fl. Brit. articulati var. $\beta$. "culmo erectiore, panicula ramosiori,
floribus minoribus, pallidioribus et obtusioribus." At the same time I cannot admit it to be these following, which are there referred to, viz. Moris. s. 8. t. 9. f. 1. nor Relhan's articulatus, who gives his from Leers, petala acutissima. Nor is it $R$. Syn. 433. No. 9. entirely;-it is Doody's plant there mentioned, which he tells us he found in Peckham-field, "cum glumis albis." It may, by the definition, be Haller's plant, No. 1323, " foliis teretibus articulatis, panicula repetito-ramosa ;" but his description evidently comprehends the second as well as this. Withering's 5 th var. of articulatus, p. 347. "husks white," seems to be this plant.

These references prove that this species has not hitherto escaped notice; but I wonder that the character, from whence I was inclined to take its trivial name, has not been noted by any writer I have seen!

As I wished to avoid the confusion which naturally arises from repeatedly changing names, my design was to have named the three species;-the first, compressus; the second, nemo-rosus-both after Dr. Sibthorp; and my third, divaricatus-a trivial appellation which I think particularly suitable to it.

I communicated this my idea, of three species, to my respected friend Dr. Smith, who gave it as his opinion that they ought to be separated, and that the same thought had occurred to Ehrhart, who has made three species of them, under the following names:-lampocarpus, (my first); acutiflorus, (my second); obtusiflorus, (my third); which accord exactly with my notion.

These names I now adopt; and, as I have not seen Ehrhart's definitions, I define them as follows.

> Juncus, \&c.
> * Culmis foliosis.
> + Foliis nodoso-articulatis.

lampocarpus. J. foliis compressis, paniculâ terminali compositâ Ehrh. Calam. erectâ, calycis foliolis tribus exterioribus ovato-

No. 126. lanceolatis, acuminatis; interioribus, scariosomarginatis obtusiusculis, capsulâ ovatâ triquetrâ stylo brevi terminatâ fusco-purpureâ nitidâ, culmo 3-6-folio.
acutiflorus. J. foliis compressiusculis, paniculâ terminali suEhrh. Calam. pradecompositâ diffusâ, calycis foliolis omnibus

No. 66. lanceolatis acuminatis, capsulâ ovato-oblongâ triquetrâ mucronatâ, culmo 3-4-folio.
obtusifforus. J. foliis terretibus, paniculâ terminali supradeEhrh. Calam. compositâ, pedunculis divaricato-refractis! caly-

No. 76. cis foliolis ellipticis obtusis, capsulâ ovato-acuminatâ triquetrâ, culmo bifolio!

The capsules of lampocarpus are by much the largest; those of acutiflorus are evidently larger, and more elongated, than those of obtusiflorus; (i. e.) the largest and strongest plant bears the smallest capsule.

The branches of the panicle in lampocarpus are sometimes but once divided, but frequently twice, and even thrice, as well as in the two other species.

When lampocarpus happens, from some accidental cause, to flower late in the season, so as not to perfect its large and polished capsules, it may be distinguished by a disposition to be-

14 Mr. Davies's Determination of Three British Species of Juncus. come viviparous, and branching at the joints,-a property which I never observed in either of the other two species.

Another character whereby obtusiflorus may be known, even at a distance, is, that where it is found in any plenty, a number of the panicles are frequently seen entangled together, so as not easily to be disengaged; this proceeds from the extreme divarication of the branches of the panicle.


## Biodiversity Heritage Library

Davies, Hugh. 1810. "III. A Determination of Three British Species of Juncus, with Jointed Leaves." Transactions of the Linnean Society of London 10, 10-14. https://doi.org/10.1111/j.1096-3642.1810.tb00012.x.

View This Item Online: https://www.biodiversitylibrary.org/item/46585
DOI: https://doi.org/10.1111/j.1096-3642.1810.tb00012.x
Permalink: https://www.biodiversitylibrary.org/partpdf/28011

## Holding Institution

Natural History Museum Library, London

## Sponsored by

Natural History Museum Library, London

## Copyright \& Reuse

Copyright Status: Public domain. The BHL considers that this work is no longer under copyright protection.

This document was created from content at the Biodiversity Heritage Library, the world's largest open access digital library for biodiversity literature and archives. Visit BHL at https://www.biodiversitylibrary.org.

