Recd. Sept. 17th

Ans. ~~Aug~~ May 28th 1839.

Mayton, August 27th, 1838.

Dear Sir.

Your favor of the 4th inst has been received, and an opportunity offering, I send you a few plants, none of them new, perhaps, but some of them subject to some doubts or uncertainties, on which I should like to have some information. I have numbered the specimens and shall refer to them accordingly in my suggestions or inquiries.

No 1. Doctor Frank, a German Botanist, who visited this neighborhood, called it a Mühlenia, certainly improperly; and others call it Aster Amygdalinus, which does not satisfy me. Your edition of 1826 describes that as a foot high and the scales of the calyx lanceolate, obtuse. This plant I have never seen less than three feet high and sometime it is six. Its only locality here is in wet prairies.

No 2. This beautiful plant I have not been able to determine. It is frequently very much branched, 12 to 20 inches high, found in dry prairies.

No 3. I sent a specimen of this to Dr Short, who called it the Shortii, yet it does not agree with Riddell's description, which is copied in Eaton's Manual of 1836, and which Riddell says was made from dried specimens. I wrote down a description from numerous specimens growing before me. "Leaves all entire; pubescent, rough. Upper ones linear-subulate; middle ones linear-lanceolate, sessile; lower ones cordate-sagittate, on very long, winged petioles. Stem rough, with slender branches, slightly panicled. Peduncles scaly; scales subulate, appressed. Calyx imbricate, cylindric. Flowers purple with yellow disks, very similar to those of the A. laevis. 3 feet high. Dry prairies. Sept." If this plant is the Shortii, the description is very erroneous.

No 4 is a Solidago growing in wet prairies, 4 to 6 feet high, with a triangular stem, inching almost like the raspberry.

No 5 is found in the same places with the preceding, a little later. I have not been able to find a satisfactory description of either of the two last plants.

No 6 is from the same locality with the two last. I had marked it as the S. stricta; but Riddell has made a new species of it, and named it the Ohioensis. Yet it still appears to me to answer the description of the stricta, and if they differ, the variation should be more marked in the books.

No 7 is the S. Riddellii, of which you probably have specimens. It grows in the same wet prairies with the three preceding numbers.

No 8. This Eupatorium agrees tolerably well with the abridged description of the E. glaucescens, except in its height, which with us is from 4 to 6 feet, instead of 2.

No 9. A Senecio from wet prairies. This does not agree with the description of any species in your Compendium; differing from the gracilis in its stem-leaves, peduncles and rays; from the aureus and balsamitae in its radical leaves, and some other respects; and only wanting obovate radical leaves to make it the obovatus.

No 10. From dry grounds, always paler than No 9. Its radical leaves only agree with those of the gracilis, but its stem-leaves and peduncles and rays entirely differ.

No 11. Cacalia Tuberosa. Riddell, in his Supplementary Catalogue, in reference to this plant, says it "agrees with Nuttall's description with these exceptions;—lower leaves spatulate and oval, instead of ovate; upper leaves with many prominent lateral teeth, not entire; about three feet high instead of 4 to 6 feet." &c.

In addition to the note made upon the paper to which the specimen is attached, I would remark that some of the plants have their lower leaves ovate and some oval-lanceolate, so that neither Riddell nor Nuttall is entirely correct with regard to this particular. The root agrees with Nuttall's description. The radical leaf has seven nerves in this specimen. The height of the plant is generally 3 feet here, but it is sometimes 4.

No 12. A. Helianthus which Prof. Frank called Virgatus, I think upon the authority of Sprengel. Having found no satisfactory description of it in our books, I adopted the name, which seems very appropriate. Its height is from 5 to 7 feet.

No 13. This is a plant very similar to the Arabis Rhomboidea in some respects, growing in wet prairies and other swampy grounds, flowering about a month later in the season. I do not know what it is. The general difference in the appearance of the plants is fairly shown by the specimens on the same sheet, yet many take them to be identical.

No 14. The plant which Riddell calls Hydrophyllum hispidum. The description of H. macrophyllum, as given in Eaton's last edition, does not differ from this plant; although they may not be the same.

No 15. This Dodecatheon does not agree with the description of the D. Meadia or of the D. integrifolium. The flowers are always white; indeed I have never seen one of another colour. It is always called "The Pride of Ohio," here. If it only varies from the description of the integrifolium in the color, it should be mentioned accordingly. If it is a distinct species, please name it Ohioensis.

No 16. You will see a very great difference between this specimen and the loose ones; yet I have heard both called T. Virginica. The flower attached to the paper is not described in any work that I have seen. The loose ones I have always considered the Virginica. The following are some of the particulars in which the difference is very marked. The Virginica flowers in May; the other in July, and even in September. The Virginica has joints 6 or 8 inches long; the other has them more numerous, and from a half to 4 inches long. In the V. the leaves are 12 to 15 inches long, but not more than 1 inch wide, smooth and elongated; the other has leaves 2 inches wide and not more than 8 inches long, and pubescent. The V. has numerous pedicels at each joint, at each of which several flowers are open at once; in the other the pedicels are fewer, and one flower only appears at one time, at each joint. The Vig. is described as 1 foot high, yet I have seen them from 2 to 3 feet; the other grows 5 feet high. There is a singular local distinction here. The Virginica grows on the East side of our river, the Miami, and the other on the West side, both very abundantly, but I have never seen either of them on the opposite sides of the stream, except when transplanted into a garden. If this should be an unnamed species, please name it Ohioensis also.

I should be pleased, if, at some leisure time, you would take the trouble to give me any information with regard to these plants, which I have been unable to name; and if any thing I have suggested shall prove worth consideration, I shall feel gratified in having been of the slightest service to you.

Yours
John W. Van Cleve

Prof John Torrey.