THREE NEW SPECIES OF TRADESCANTIA FROM THE UNITED STATES.

By J. N. ROSE.

The beginning of my studies on the genus Tradescantia dates back some seven years. During this time an immense amount of material has passed through my hands. The National Herbarium has undoubtedly the largest collection of American Tradescantias ever brought together. For instance, we now have 110 sheets of the old *T. virginiana*. Not only have I been collecting herbarium material, but I have grown a number of species.

I am now preparing a monograph of the United States species of the genus, and it is my intention to illustrate all the species with colored plates. A part of these illustrations have already been made.

Botanists will confer a great favor if they will send me not only herbarium specimens, but roots. I should prefer to have the herbarium specimens collected this season and roots from the same clumps sent late in the fall. When this can not be done the roots of flowering specimens may be sent at once. I desire specimens not only of the rarer species and of plants from out-of-the-way places, but of many of the so-called forms of what is generally known as *T. virginiana* from all of our Eastern States. Franks will be furnished upon application for sending material.

My studies of the western Tradescantias have revealed three undescribed species. Two of these I have never seen outside of the National Herbarium, while the other is not uncommon, having been distributed by many collectors as a form of *T. virginiana*. All three have flowered for two seasons in Washington and one has been under observation for four years. These species may be described as follows:

Tradescantia humilis Rose, sp. nov.

Stems low, 3 dm. or less high, at first simple, but becoming much branched at base and spreading, with more or less roughish pubescence; leaves short, dark green, oblong-linear, with rough pubescence; umbels usually several, sometimes 10, terminating stem and branches, more or less peduncled; involucral leaves more or less unequal, sometimes reduced to one, very similar to other leaves; pedicels and ovary more or less glandular; sepals narrow, acute, glandular-pubescent, and with a tuft of simple hairs near the tip; petals pale blue or pink, obtuse.

Specimens examined-

Eastern Texas:

Near Austin, E. Hall (No. 669), 1872.

Near Industry, H. Wurzlow, 1895, 1896, 1897.

The type of this species is Mr. Wurzlow's 1895 plant deposited in the National Herbarium.

Specimens have been grown in Washington since 1895.

Tradescantia gigantea Rose, sp. nov.

Plants growing in clumps; stems stout, thick, upright, glabrous and glaucous below, 6 to 10.5 dm. high, more or less branching, the branches slender and erect; leaves large, oblong-linear, 3 dm. or so long, 12 to 36 mm. wide, dark green above, pale green and glaucous beneath, glabrous except the margin; sheath glabrous; top of stem and base of involucral leaves covered with a short, dense, almost velvety pubescence; involucral leaves 2 or 3, short, their bases much enlarged; flowers very numerous, 50 or more; pedicels soft-pubescent, not glandular, 30 to 40 mm. long; sepals boat-shaped, 10 mm. long, acute, pubescent, but not glandular; petals blue or pink, with white form; overy pubescent, but not glandular.

Specimens sent by Otto Locke, New Braunfels, Tex., April 14, 1897. Also by F. G. Schaupp, Shovel Mount, Burnet County, Tex., April 21, 1897. These specimens are unlike any others which we have seen.

This is an extremely large, coarse plant. It is a very abundant bloomer, producing immense clusters of flowers. It is readily recognized by its almost velvety peduncles, pedicels, and sepals.

Tradescantia scopulorum Rose, sp. nov.

Stems rather low and very slender, 4 dm. or less high, more or less branching, pale and glaucous, mostly glabrous throughout; radical leaves numerous, linear, generally erect, stem leaves similar, very narrow (2 to 10 mm. wide); sheath very short and turgid; involucial leaves filiform, somewhat unequal, much shorter than the leaves; umbels sessile, rather numerous, terminating stem and branches; pedicels slender; sepals narrower; petals very pale blue, acute.

Arizona to Texas, north through Colorado to Montana, perhaps extending into western Nebraska. The type of this species is the plant found by Mr. Pringle in the Santa Catalina Mountains, Arizona. Its range is not well defined, but I have assigned to it all those forms which have been referred to T. virginiana from western Texas, Arizona, New Mexico, Utah, Colorado, Montana, and western Nebraska. Specimens sent me by Mr. George Osterhout from western Colorado are very pubescent in the umbel, but in other respects like the type.

This species has generally been referred to T. rirginiana with doubt, or mentioned as the "narrow-leaved western variety," and so far as I can learn no name has been assigned to it. It appears to be quite distinct from typical T. rirginiana, and can be identified at a glance by one familiar with the genus. It is not easy, however, to express these differences, and on this account some of my statements above may need revision. Briefly, it differs from true T. rirginiana in its slender branching habit, slender and glaucous leaves, and numerous flowering umbels, as well as in its very distinct range.

Specimens examined-

Arizona:

By streams of the Santa Catalina Mountains, C. G. Pringle, May 16, 1881 (type).

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Flag Staff, D. T. McDougal, July, 1891.

Pinal Mountains, J. W. Toumey, July 20, 1892 (No. 439).

_____, Dr. E. Palmer, 1869.

Oak Creek, H. H. Rusby, June, 1883.

Holbrook, Mrs. Myrtle Zuck Hough, August 22, 1896.

Snowflake, Mrs. Myrtle Zuck Hough, August 7, 1897.

Colorado:

New Windsor, Geo. E. Osterhout, June, July 4, 1895.

Colorado Springs, F. H. Knowlton, June 15, 1896 (No. 33).

Along the Platte River, Denver, Marcus E. Jones, June 12, 1878; Denver, E. Bethel, June, 1893.

New Mexico:

---- C. Wright, 1851-52 (Nos. 1928 & 1929).

Valley of the Rio Grande, below Donana, C. C. Parry, etc. (No. 1498).

Nebraska:

On Middle Loup River, near Thedford, Thomas County, on sand hills, P. A. Rydberg, June 18, 1893 (No. 1380).

Indian Territory:

Fort Smith to the Rio Grande, banks of the Canadian River, Dr. J. M. Bigelow, 1853-54.

Montana:

J. W. Blankinship, June 3, 1890 (No. 57).