

## TETRAPLOID PASSIFLORA INCARNATA IN NORTH CAROLINA.

— The genus *Passiflora* L. in North Carolina is represented by two relatively distinct species. *Passiflora lutea* L., the yellow passion-flower, is infrequent and occurs in more mesic environments than the common *P. incarnata* L., the passion-flower or maypops (Blomquist and Oosting, 1959). The latter species has been seen on road banks or railroad banks in dry soils harboring little other vegetation and providing rapid runoff of surface water after summer showers. These are often fully exposed to sunlight throughout the day.

Specimens of *P. incarnata* were collected in July, 1962, one mile north of U. S. Highway 15-501 & 70 bypass on Duke Street, Durham Co., Durham, North Carolina (*Lloyd 1001*, Duke University Herbarium). Buds were opened and fixed in 1:3 acetic alcohol at 11:00 AM, and later squashed in acetocarmine. Microsporogenesis of sporocytes showed 18 bivalents at metaphase 1.

The finding of tetraploid *P. incarnata* coupled with previous counts of  $n = 9$  by Storey (1950) and Bowden (1945) establishes the presence of polyploidy in this species. In view of the lack of quadrivalents in the plants I examined they may have been of allotetraploid origin. Diploid (Baldwin, 1949) and tetraploid (Bowden, 1945) strains of *P. lutea* also occur and both species should be investigated further to determine the origin and distribution of their included polyploid races, which may have some application to horticulture.

Special thanks are due the staff of Duke University for the use of their facilities and Dr. Peter Raven for his comments in the preparation of the manuscript. —ROBERT M. LLOYD, DEPARTMENT OF BOTANY, DUKE UNIVERSITY, DURHAM, NORTH CAROLINA.<sup>1</sup>

## LITERATURE CITED

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A RECENT ILLINOIS COLLECTION OF *SANGUISORBA CANADENSIS* L. — The last definite date for a specimen of American burnet, *Sanguisorba canadensis* L., in Illinois is fifty-five years ago. This material was collected by E. J. Hill, Sept. 25, 1907, moist prairie by R. I. Railroad, Joliet, Will County. Previous collections by H. L. Boltwood and A. B. Seymour are known from Ottawa, LaSalle County, dated 1880 and 1882. A statement in VASCULAR PLANTS OF ILLINOIS (Jones, Fuller et al., 1955) says: "Moist ground, very rare, or possibly extinct in Illinois." An S. B. Mead specimen is cited in the same publication: "Cass Co.: Beardstown, Aug. 27 — ?". In view of the interval since the last collection of this species and in connection with the questionable date of the Cass County specimen, the following information seems pertinent.

Illinois is perhaps near the southwestern limit of distribution of *S. canadensis* L., and a recent collection by Mr. R. T. Rexroat of Virginia, Illinois, will verify the continued occurrence of this species in the state. Collection data are as follows: Cass Co., Illinois, south of Beardstown, once swampy area (moist only when the specimen was collected), Sept. 15, 1962, *R. T. Rexroat 8577*, (ISM).

Mr. Rexroat, an amateur botanist and collector, has demonstrated the value of such collectors and their contributions to a continued study of the flora of Illinois. Since 1953 Mr. Rexroat has collected eight species of vascular plants previously not recorded for Illinois and six of these are from Cass County. The following list is furnished although many of them were reported in previous issues of RHODORA. Cass



Lloyd, R M. 1963. "Tetraploid *Passiflora incarnata* in North Carolina." *Rhodora* 65, 79–80.

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