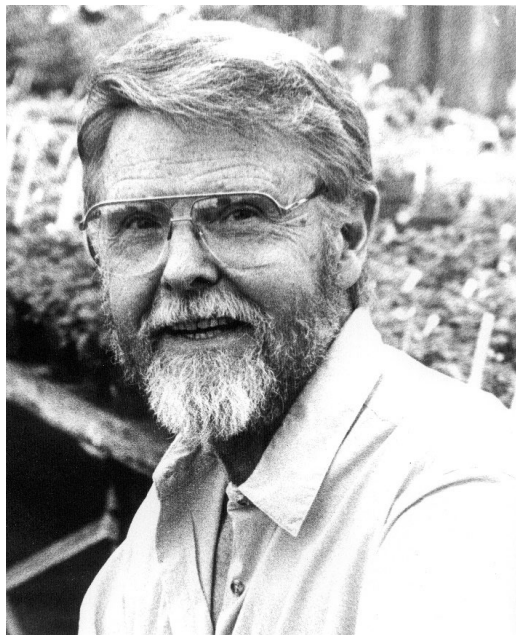


Robert Kingston Vickery, Jr.—In Memoriam



Robert Kingston Vickery, Jr.

Dr. Robert Kingston Vickery, Jr., emeritus professor in the School of Biological Sciences of the University of Utah, passed away at age 99 on 20 July 2022 in Salt Lake City with his wife of 71 years, Marcia Hoak Vickery, in attendance. His life was filled with adventure, accomplishment, and love. He was born in Saratoga, California, to Robert Kingston Vickery, Sr., and Ruth Bacon Vickery on 18 September 1922—the oldest child and only son; he had 2 younger sisters, Mary and Ruth. Bob started school in Europe, with stops in England, France, and Italy, where his father was assigned to grow Cal Spray, the company he worked for. When Bob was in first grade at a Montessori-type school in Rome, he showed an early love for plants by growing flowers, vegetables, and other plants in a planter box, rather than tending to more traditional subjects. Returning to the Bay Area of California when he was 7, Bob completed primary and

secondary schools and entered college at Stanford, with a class or two at University of California, Berkeley. He emphasized architecture, science, and engineering.

When World War II intervened, Bob enlisted in the U.S. Army Air Corps, where he was trained in meteorology and communications, was commissioned as a 2nd lieutenant, and received an A.B. degree in civil engineering (February 1944) from Stanford, with his Air Corps training contributing to the graduation requirements. After some brief stateside postings, he was sent to Hickam Field in Hawaii in the Army Airways Communication System, and then as a new 1st lieutenant to Iwo Jima, where from his arriving ship he saw the raising of the Stars and Stripes on Mt. Suribachi. He was the officer in charge of control towers on Iwo Jima, and he built the first one out of scrap materials. At the end of the war, he came home on a stretcher as a victim of tuberculosis and spent a year recovering in hospitals and at home, during which time he decided to do experimental work with plants as a career. To that end he enrolled at Stanford and completed an M.A. (1948) in which he studied roadside plantings. He then undertook a Ph.D. (1952) at Stanford as well. His dual-major professors for his doctorate were Dr. Ira L. Wiggins (e.g. see Shreve and Wiggins 1964, Wiggins 1980, and Wiggins and Porter 1971), a renowned classical plant taxonomist, and Dr. Jens C. Clausen (e.g., see Clausen 1951), a pioneering Danish American genecologist with appointments at both the Carnegie Institution of Science and Stanford University. Bob learned a great deal from both of them and other faculty. It turns out that just prior to Bob's graduate studies, an international group of geneticists met at Carnegie Mather Field Station in the Sierra Nevada and attempted to identify a plant species that could serve as an interdisciplinary experimental organism in genetic studies, much as the fruit fly (*Drosophila melanogaster*) had served as an animal model. The group suggested that the monkeyflower

(genus *Mimulus*; water-loving plants found along watercourses and even in wet places in desert environments) might serve this purpose (Clausen et al. 1947, Nobs 1954). Bob settled on that plant. It has served him and science well, even if it didn't quite meet the scientific apex that *Drosophila* rose to. One highlight of the *Mimulus* research was a symposium, *Evolution of the Mating Systems in the Genus Mimulus*, hosted by the Botanical Society of America in 2002 at the University of Wisconsin in Madison in honor of Dr. Vickery. There, a dozen internationally acclaimed scientists presented state-of-the-art research on *Mimulus*, and Dr. Vickery was recognized and feted as the leader and pioneer in this research effort. It was my privilege to present Dr. Vickery's personal story on that occasion (McArthur 2002).

His work at Stanford involved hybridization of populations and species, cytogenetics, and experimentally determining plant relationships. In addition to working on his dissertation, he met many international scientists and scholars visiting the Carnegie Institution and Stanford, spent several weeks in Europe one summer visiting major plant research stations, presented his *Mimulus* research findings at the VII International Botanical Congress in Stockholm, and taught General Botany and Plant Systematics for a semester at Pomona College, Claremont, California, while the eminent taxonomist Lyman Benson was on sabbatical.

In 1951 he married Marcia Hoak, a Stanford undergraduate from Pasadena, California; they subsequently had 2 children (David K. in 1952 and Peter H. in 1954). The young couple moved to Salt Lake City in 1952 where Bob accepted a position as assistant professor of botany and genetics at the University of Utah. It was a good match for the Vickerys and the university. Bob rose through academic ranks with regularity: associate professor, 1957; professor, 1964; and university professor, 1988. This latter rank, a rare honor among faculty, came not only with remuneration but also in his case the opportunity to teach a special evolutionary biology course for 5 years, in which he took the students (30 per year) to the Galápagos Islands, a natural laboratory made famous by Charles Darwin's *Voyage of the Beagle* trip. Bob built upon that opportunity by obtaining a National Science Foundation

grant to include high school biology teachers (some 40 over the years) in the class. Since his 1994 retirement, Bob has been known academically as professor emeritus.

At the University of Utah, Bob's activities can be divided into 3 general areas: teaching, administration and service, and research.

Bob was a masterful teacher and taught a broad array of biological subjects to both general education students and subject-area majors. He taught both undergraduate and graduate courses. Some of the general biology classes were large and were taught using television technology. His courses included General Biology, Field Botany, Trees and Shrubs, Plant Systematics, Heredity, Human Genetics, Plant Genetics, Radiation Genetics, and Evolution. He also conducted tutorials, special problems courses, and graduate seminars. His teaching was recognized with the University of Utah Distinguished Teaching Award in 1972. In 1961 he was a visiting associate professor at Harvard, where he taught General Botany. He gave many invited seminars on his research work at various universities. Over the course of his career, Bob taught about 12,000 students.

I illustrate his effectiveness as a teacher with my personal example. In the fall of 1964, I enrolled in his Heredity class (basic genetics) rather by chance. The class I was to take for my major requirement was full (in those days, you registered by computer enrollment cards that were given to you at an in-person registration event held in a large hall; when the enrollment cards for a class were gone, the class was full and you could not register), and my counselors suggested that I take Heredity instead. I loved the genetics class and the clear and intriguing way Dr. Vickery presented the material and himself. I changed majors, graduated in his department—the Department of Molecular and Genetic Biology at the time—and became a graduate student under his tutelage.

Bob's leadership skills were quickly recognized by his colleagues and university administrators. Biology at the University of Utah comprised several separate departments during Bob's tenure, and he was a participant in the planning and reorganization each time changes were made at both the department and college or school levels. In 1970, these various departments merged into the Department of Biology, which later

became the School of Biological Sciences. Bob served as department chair of the Department of Genetics, 1962–1965. He served on many committees as well, often in leadership roles—Biology Department Execution, Biology Curriculum, department searches, College of Science Council, College of Science Curriculum, University Scholastic Standards, and University Academic Senate. His administrative skills were used also in a broader sense. He administered the University's Graduate Training in Genetics program, supported by the National Institutes of Health for 25 years. He was active in professional societies and panels throughout his career. These activities included the following: editorial advisor, American Society for Cell Biology, 1961; member, National Institutes of Health Fellowship Panel, 1964–1969; associate editor, *Evolution*, journal for the Society for the Study of Evolution, 1968–1972; council member, International Organization of Plant Biosystematists, 1975–1983; 1st vice president, Society for the Study of Evolution, 1977–1978; and 2nd vice president, California Botanical Society, 1983–1988. He was frequently called upon to serve as a peer-review referee for manuscripts submitted to professional journals and to evaluate grant proposals for funding by agencies or institutions.

Bob's research activities, including shepherding and mentoring graduate and undergraduate students, are truly monumental. His research on *Mimulus*¹ was principally focused on 2 taxonomic sections or subdivisions of the genus: (1) the mainly yellow-flowered section *Simiolus*, which occurs naturally in North and South America and is composed of several species and subspecies (these showy plants were introduced into Europe as ornamentals in the 18th and 19th centuries; species were hybridized by horticulturalists, and several taxa and their hybrids became naturalized. During my postdoc at the University of Leeds in England, I saw the naturalized plants in streams and in people's gardens and did some genetic work on them [McArthur 1974]); and

(2) the mainly red-flowered section *Erythranthe*, which occurs in western North America from Canada to Mexico and is made up of 6 species. His research was broad ranging and examined (1) hybridization (accomplished by emasculating the anthers from opening flower buds and applying pollen from the anthers of the desired parent to the stigma of the recipient plant to generate hybrid seed), crossing barriers, gene exchange, and breeding systems; (2) cytogenetics (chromosome constitution, construction, and behavior); (3) species variation, population variation, and taxonomic placement; and (4) ecology, physiology, plant chemistry, and adaptation. To this end, he systematically sampled natural populations and used plants collected in the wild in carefully designed controlled experiments conducted in greenhouses and growth chambers. While most of the research work was performed in the Vickery laboratories and greenhouses at the University of Utah, Bob spent a semester (1955) as a research fellow at Cal Tech where some of the growth chamber work was performed. His research was funded by a series of grants from the National Science Foundation and by the University of Utah Research Committee. Many of the analyses were laboratory based and involved sophisticated equipment. While Bob did hands-on research, he also collaborated with and trained many graduate students; these included 18 master's degree students, 12 doctoral students, and 6 postdoctoral fellows/associates (Table 1). These students have gone on to substantial and meaningful careers in academia, government, and private industry in several countries. In addition, he served as an advisor on the research committees of numerous students of other major professors. Research results were published in scientific journals, book chapters, and conference proceedings. He presented research findings, usually by invitation, at national and international meetings and conferences (e.g., in Australia, Canada, Hungary, Japan, Netherlands, Russia, Sweden, and United States of America). His body of published works is near 100 (see the appended publication list).

¹I note that the taxonomic status of *Mimulus* and the family Scrophulariaceae has undergone some revision in recent years since Bob was an active researcher. The large figwort (Scrophulariaceae) family was deemed to be unnatural, and many of its constituent genera were reassigned to other families (Fischer 2004), including *Mimulus*, which is currently placed in the lopsseed or Phymaceae family, as Dr. Vickery recognized in his last publication (Vickery 2008). Likewise, the genus *Mimulus* has undergone revision (Barker et al. 2012, Nesom 2014). However, the 2 traditional sections that Bob's work centered on, *Simiolus* and *Erythranthe*, remain more or less intact, though the revisionists now label them sections *Simiola* and *Erythranthe*, respectively, in the genus *Erythranthe*. In my opinion, Bob's research results remain robust, and, in this article, I use the classical taxonomy that Bob Vickery followed in his career.

TABLE 1. Graduate students and postdoctoral fellows/associates in Robert K. Vickery's laboratories.

Name	Degree granted	Title	Career
MASTER'S DEGREES			
Frank John Coram	M.A. 1953	A comparative study of <i>Mimulus cardinalis</i> and <i>Mimulus lewisii</i> and their hybrids	Physician
Richard L. Olson	M.S. 1955	The inheritance of flower color in a cross between <i>Mimulus cardinalis</i> and <i>Mimulus lewisii</i>	Ph.D., University of California, Berkeley; Space station research, Boeing Company
Delbert Wiens	M.S. 1957	Taxonomic revision of the members of the genus <i>Phoradendron</i> occurring in the United States	Ph.D., Claremont Graduate School; Professor of Biology, University of Utah and other schools
Charles D. Ogezwalla	M.S. 1957	The respiratory rates of various races of <i>Mimulus</i>	Ph.D., University of Utah; Professor of Pharmacy, University of Nebraska
David Gilroy Anderson	M.S. 1958	Genetic relationships among four species of the section <i>Erythranthe</i> of the genus <i>Mimulus</i>	Vice President, College of Forestry, State University of New York, Syracuse
Betty Mills Wullstein	M.S. 1958	Inheritance of anthocyanins and anthoxanthins in the <i>Mimulus cardinalis</i> complex	Ph.D., University of Utah (with Vickery)
Glynn Colin Bennion	M.S. 1960	Hybridization of <i>Populus fremontii</i> and <i>P. angustifolia</i> in Perry Canyon, Box Elder County, Utah	Junior High School Teacher
Karen Woodbury Crook	M.S. 1964	A statistical study of variation and evolution in <i>Mimulus guttatus</i>	Ph.D., University of Utah (with Vickery)
H. Gail Pollock	M.S. 1964	The flavonoids of the genus <i>Mimulus</i>	Research Associate, University of Kansas Medical School
E. Durant McArthur	M.S. 1967	Cytogenetic studies of Mexican and Guatemalan populations of <i>Mimulus glabratus</i> (Scrophulariaceae)	Ph.D., University of Utah (with Vickery)
Ralph Howard Riches	M.S. Ed. 1967	The development of a laboratory supplement for a high school genetics course	Professor of Genetics, Kansas State Teachers College, Pittsburg, KS
Richard Snyder, Jr.	M.A. 1967	Preliminary studies on the development of pigmentation in <i>Mimulus</i> flowers	High School Teacher
Frank A. Eldredge II	M.S. 1969	A study of the cytogenetic relationships of some of the diploid members of the <i>Mimulus glabratus</i> complex	Ph.D., University of Utah (with Vickery)
Sun Szen Hsu	M.S. 1970	A phenetic and phylogenetic investigation of the <i>Mimulus glabratus</i> complex (Scrophulariaceae)	Ph.D., University of Utah (with Vickery)
George J. Baldwin	M.S. 1971	Floral flavonoid studies of the <i>Mimulus luteus</i> complex, section <i>Siniolus</i>	Catholic Priest
Ari Ferro	M.S. 1971	Flavonoid floral pigments in the <i>Mimulus luteus</i> complex	Ph.D., University of Utah (Biochemistry); Research Associate, Department of Biology, University of Utah
Geetha Ganesan	M.S. 1990	Analysis of possible new species in <i>Mimulus</i>	Homemaker
Stephanie C. Watrin	M.S. 1992	Genetic variation within and among nine populations of <i>Mimulus</i> section <i>Erythranthe</i>	

TABLE 1. Continued.

Name	Degree granted	Title	Career
DOCTORAL DEGREES			
Baird B. Mukerjee	Ph.D. 1958	Cytogenetic studies on the patterns of evolution in section <i>Simiolius</i> of the genus <i>Mimulus</i> (Scrophulariaceae)	Department Chair, Biology Department, McGill University Montreal, Canada
Delbert W. Lindsay	Ph.D. 1960	The crossing behavior and cytogenetics of <i>Mimulus guttatus</i> Fischer in the Bonneville Basin	Professor of Biology, Ricks College, Rexburg, ID
Md. Mohatazuddin Mia	Ph.D. 1961	Cytogenetic studies on the patterns of evolution of the <i>Mimulus glabratus</i> complex (Scrophulariaceae)	Director, Nuclear Agriculture, Bangladesh Agricultural University, Mymensingh, Bangladesh
Mohammed T. Alam	Ph.D. 1966	Cytogenetic studies of the <i>Mimulus glabratus</i> complex (Scrophulariaceae)	Cytogeneticist, Quebec Ministry of Health, Canada
William Tai	Ph.D. 1967	A cytogenetic investigation of diploid members of the <i>Mimulus glabratus</i> complex	Professor of Botany, Michigan State University, East Lansing and University of Manitoba, Winnipeg, Canada; Botanist, Missouri Botanical Garden, St. Louis
Kenneth Glade Wilson	Ph.D. 1968	The molecular and genetic biology of floral flavonoids of the <i>Mimulus cardinalis</i> complex	Professor of Botany, Miami University, Oxford, OH
E. Durant McArthur	Ph.D. 1970	A cytogenetic and evolutionary study of aneuploid-tetraploid <i>Mimulus glabratus</i> (Scrophulariaceae)	Program Manager, USDA Forest Service, Rocky Mountain Research Station, Shrub Sciences Laboratory, Provo, UT
Karen W. Hughes	Ph.D. 1972	Evolution of the <i>Mimulus luteus</i> complex	Chair, Department of Botany, University of Tennessee, Knoxville
Miriam Bloom	Ph.D. 1972	Floral flavonoid patterning in the <i>Mimulus luteus</i> complex	Research Associate, Washington University, St. Louis, MO
Frank A. Eldredge II	Ph.D. 1972	The crossing and cytogenetic relationships of some Great Plains diploids of the <i>Mimulus glabratus</i> complex (Scrophulariaceae)	Associate Professor, Botany, Central Michigan University, Mt. Pleasant; Scientist for two Utah chemical companies
Sun Szen Hsu	Ph.D. 1974	Esterases as indicators of the phylogeny and relationships of the <i>Mimulus glabratus</i> complex	Research Associate, Department of Botany, University of Michigan, Ann Arbor
Betty Mills Wullstein	Ph.D. 1981	Comparative taxonomy of the section <i>Erythranthe</i> (genus <i>Mimulus</i>) using methods of cytology, biosystematics, numerical taxonomy, chemical taxonomy, and DNA/DNA hybridization	Geneticist, State Arboretum of Utah, Salt Lake City
Name			
Dates			
POSTDOCTORAL FELLOWS/ASSOCIATES			
Baird B. Mukerjee	1959–1960		
Yaw En Chu	1970–1974		
Nickolas M. Waser	1977–1979		
Mary Price	1977–1979		
Steven Sutherland	1983–1987		
Mitch Aide	1989–1991		

Besides the University of Utah teaching and research awards mentioned earlier, Dr. Vickery has been listed in numerous “who’s who” publications, including as a recipient of the premier *Marquis Who’s Who* Albert Nelson Marquis Lifetime Achievement Award.

One measure of a person is the respect and admiration accorded by peers. In that respect, Dr. Vickery stands at the apex. Colleagues in his department, throughout the university, and beyond enjoyed working and associating with him. His honest but gracious interactions and feedback were appreciated. When working with his students, he expected and motivated their best efforts, but he was supportive, understanding, empathic, and always mindful. And, he helped them land jobs, kept track of them, and recognized their achievements. He put the well-being and recognition of others beyond his own interests. His graduate student office and laboratory suites and the large Biology Building rooftop greenhouse most often included several graduate students who, profiting from his example and leadership, worked together remarkably well.

Besides his professional contributions, Bob was a wonderful husband, father, grandfather, son, brother, uncle, and neighbor. He enjoyed science, teaching, and life—especially hiking, skiing, and reading. He and Marcia really enjoyed traveling, often to the islands of the South Pacific.

LITERATURE CITED

- BARKER, W.R., G.L. NESOM, P.M. BEARDSLEY, AND N.S. FRAGA. 2012. A taxonomic conspectus of the Phrymaceae: a narrowed circumscription for *Mimulus*, new and resurrected genera, and new names and combinations. *Phytoneuron* 2012-39:1–60
- CLAUSEN, J. 1951. Stages in the evolution of plant species. Cornell University Press, Ithaca, NY. 206 pp.
- CLAUSEN, J., D.D. KECK, AND W.M. HIESEY. 1947. Experimental taxonomy. Carnegie Institution of Washington Year Book 46:95–104.
- FISCHER, E. 2004. *Scrophulariaceae*. Pages 333–432 in K. Kubitzki and J.W. Kadereit, editors, Flowering plants—Dicotyledons: Lamiales. The families and genera of vascular plants. Volume VII. Springer-Verlag, Berlin.
- MCARTHUR, E.D. 1974. The cytotaxonomy of naturalized British *Mimulus*. *Watsonia* 10:155–158.
- MCARTHUR, E.D. 2002. Dr. Robert K. Vickery, Jr., scientist and mentor: contributions to *Mimulus* genetics, evolution, ecology, and systematics. Abstract 90, page 22 in Botany 2002, Botany in the curriculum, Abstracts. University of Wisconsin, Madison, WI, 186 pp.
- NESOM, G.L. 2014. Updated classification and hypothetical phylogeny of *Erythranthe* sect. *Simiola* (Phrymaceae). *Phytoneuron* 2014-81:1–6.
- NOBS, M.A. 1954. Genetic studies on *Mimulus*. Carnegie Institution of Washington Year Book 53:157–159.
- SHREVE, F., AND I.L. WIGGINS. 1964. Vegetation and flora of the Sonoran Desert. Two volumes. Stanford University Press, Stanford, CA. 1940 pp.
- VICKERY, R.K., JR. 2008. How does *Mimulus verbenaceus* (Phymaceae) set seed in the absence of pollinators? *Evolutionary Biology* 35:199–207
- WIGGINS, I.L. 1980. Flora of Baja California. Stanford University Press, Stanford, CA. 1025 pp.
- WIGGINS, I.L. AND D.M. PORTER. 1971. Flora of Galapagos Islands. Stanford University Press, Stanford, CA. 998 pp.

E. Durant McArthur
Scientist Emeritus
USDA Forest Service, Rocky Mountain
Research Station
139 S. 1970 E.
St. George, UT 84790
edmcArthur@infowest.com

PUBLICATIONS OF R.K. VICKERY, JR.

- VICKERY, R.K., JR. 1948. The use of native species for roadside plantings in Contra Costa, Alameda, and Santa Clara Counties. Master's thesis, Stanford University, Stanford, CA. 128 pp.
- VICKERY, R.K., JR. 1950. An experimental study of the races of the *Mimulus guttatus* complex [abstract]. Proceedings of the VII International Botanical Congress, Stockholm, Sweden. Page 272.
- VICKERY, R.K., JR. 1951. Genetic differences between races and species of *Mimulus*. Carnegie Institution of Washington Year Book 50:118–119.
- VICKERY, R.K., JR. 1952. A study of the genetic relationships in a sample of the *Mimulus guttatus* complex. Doctoral dissertation, Stanford University, Stanford, CA. 253 pp.
- VICKERY, R.K., JR. 1955. Chromosome counts in the section *Simiolus* of the genus *Mimulus* (Scrophulariaceae). *Madroño* 13:107–110.
- TRAUB, H.P., AND R.K. VICKERY, JR. 1956. M.E. Jones *Hymenocallis* specimens. *Herbertia* 12:43–44.
- VICKERY, R.K., JR. 1956a. A preliminary investigation of flower color inheritance in the *Mimulus cardinalis* complex. Proceedings of the Utah Academy of Sciences, Arts, and Letters 33:35–36.
- VICKERY, R.K., JR. 1956b. Data of the interracial hybridization of *Mimulus guttatus* (Scrophulariaceae). Proceedings of the Utah Academy of Sciences, Arts, and Letters 33:37–45.
- VICKERY, R.K., JR. 1956c. Data of the interracial and interspecific hybridization in the section *Simiolus* of the genus *Mimulus* (Scrophulariaceae). Proceedings of the Utah Academy of Sciences, Arts, and Letters 33:45–64.

10. VICKERY, R.K., JR. 1956d. Data of the intersectional hybridization in the genus *Mimulus* (Scrophulariaceae). Proceedings of the Utah Academy of Sciences, Arts, and Letters 33:65–71.
11. VICKERY, R.K., JR., AND R.L. OLSON. 1956. Flower color inheritance in the *Mimulus cardinalis* complex. Journal of Heredity 47:195–199.
12. MUKERJEE, B.B., D. WIENS, AND R.K. VICKERY, JR. 1957. Chromosome counts in section *Simiolus* of the genus *Mimulus* (Scrophulariaceae). II. Madroño 14: 128–131.
13. MUKERJEE, B.B., D. WIENS, AND R.K. VICKERY, JR. 1958. Chromosome counts in section *Erythranthe* of the genus *Mimulus* (Scrophulariaceae). Madroño 14: 150–153.
14. OCZEWALLA, D.D., AND R.K. VICKERY, JR. 1958. A progress report on a new method for the study of the nature of species. Proceedings of the Utah Academy of Sciences, Arts, and Letters 35:91–94.
15. VICKERY, R.K., JR., AND B.B. MUKERJEE. 1958. Cytogenetic studies of the patterns of evolution in the *Mimulus guttatus* complex (Scrophulariaceae) [abstract]. Proceedings of the X International Congress of Genetics, Montreal, Canada 2:301–302.
16. MUKERJEE, B.B., AND R.K. VICKERY, JR. 1959. Chromosome counts in section *Simiolus* of the genus *Mimulus* (Scrophulariaceae). III. Madroño 15:57–62.
17. VICKERY, R.K., JR. 1959a. Barriers to gene exchange within *Mimulus guttatus* (Scrophulariaceae). Evolution 13:300–310.
18. VICKERY, R.K., JR. 1959b. Genetics and evolution. University of Utah Publications in Philosophy 6:5–12.
19. MUKERJEE, B.B., AND R.K. VICKERY, JR. 1960. Chromosome counts in the section *Simiolus* of the genus *Mimulus* (Scrophulariaceae). IV. Madroño 15:239–245.
20. BENNION, G.C., R.K. VICKERY, JR., AND W.P. COTTAM. 1961. Hybridization of *Populus fremontii* and *Populus angustifolia* in Perry Canyon, Box Elder County, Utah. Proceedings of the Utah Academy of Sciences, Arts, and Letters 38:31–35.
21. MUKERJEE, B.B., AND R.K. VICKERY, JR. 1961. Chromosome counts in the genus *Mimulus* (Scrophulariaceae). Madroño 16:104–105.
22. VICKERY, R.K., JR. 1961. Manual of the common native plants of the Salt Lake region. University of Utah, Salt Lake City, UT. 187 pp.
23. VICKERY, R.K., JR., AND D.W. LINDSAY. 1961. Crossing barriers in *Mimulus guttatus* in relation to recent geologic changes in the Great Basin. Pages 903–906 in Recent Advances in Botany, Volume 1. University of Toronto Press, Toronto, Canada.
24. MUKERJEE, B.B., AND R.K. VICKERY, JR. 1962. Chromosome counts in the section *Simiolus* of the genus *Mimulus* (Scrophulariaceae). V. The chromosomal homologies of *M. guttatus* and its allied species and varieties. Madroño 16:141–154.
25. MUKERJEE, B.B., D. WIENS, AND R.K. VICKERY, JR. 1963. Chromosome counts in section *Erythranthe* of the genus *Mimulus* (Scrophulariaceae). II. Madroño 17:53–56.
26. VICKERY, R.K., JR. 1963. The evolutionary potential, as measured by seed germination, of chromosome races of *Mimulus* (Scrophulariaceae) [abstract]. Proceedings XI International Congress of Genetics, The Hague, Netherlands 1:146.
27. MIA, M.M., B.B. MUKHERJEE, AND R.K. VICKERY, JR. 1964. Chromosome counts in section *Simiolus* of the genus *Mimulus* (Scrophulariaceae). VI. New numbers in *M. guttatus*, *M. tigrinus*, and *M. glabratus*. Madroño 17:156–160.
28. VICKERY, R.K., JR. 1964. Barriers to gene exchange between members of the *Mimulus guttatus* complex (Scrophulariaceae). Evolution 18:52–69.
29. MUKERJEE, B.B., D.M. REES, AND R.K. VICKERY, JR. 1966. A comparative study of the karyotypes of four genera and nineteen species of mosquitoes present in Utah. Mosquito News 26:150–155.
30. VICKERY, R.K., JR. 1966a. Experimental hybridizations in the genus *Mimulus* (Scrophulariaceae). IV. Barriers to gene exchange between the main sections. Proceedings of the Utah Academy of Sciences, Arts, and Letters 43:83–92.
31. VICKERY, R.K., JR. 1966b. Speciation and isolation in the genus *Mimulus*. Taxon 15:55–63.
32. VICKERY, R.K., JR., AND D.W. LINDSAY. 1966. Experimental hybridizations in the genus *Mimulus* (Scrophulariaceae). II. Proceedings of the Utah Academy of Sciences, Arts, and Letters 43:93–104.
33. VICKERY, R.K., JR., AND M.M. MIA. 1966. Experimental hybridizations in the genus *Mimulus* (Scrophulariaceae). III. Proceedings of the Utah Academy of Sciences, Arts, and Letters 43:105–114.
34. VICKERY, R.K., JR., AND B.B. MUKERJEE. 1966. Experimental hybridizations in the genus *Mimulus* (Scrophulariaceae). I. Proceedings of the Utah Academy of Sciences, Arts, and Letters 43:83–92.
35. LINDSAY, D.W., AND R.K. VICKERY, JR. 1967. Comparative evolution in *Mimulus guttatus* of the Bonneville Basin. Evolution 21:439–456.
36. POLLOCK, H.G., R.K. VICKERY, JR., AND K.G. WILSON. 1967. Flavonoid pigments in *Mimulus cardinalis* and related species. I. Anthocyanins. American Journal of Botany 54:695–701.
37. VICKERY, R.K., JR. 1967a. Experimental hybridization in the genus *Mimulus* (Scrophulariaceae). V. Barriers to gene exchange between section *Simiolus* and the other main sections of the genus. Proceedings of the Utah Academy of Sciences, Arts, and Letters 44: 316–320.
38. VICKERY, R.K., JR. 1967b. Growth of *Mimulus cardinalis* plants under controlled conditions. Proceedings of the Utah Academy of Sciences, Arts, and Letters 44:334–338.
39. VICKERY, R.K., JR. 1967c. Growth of *Mimulus lewisii* flowers under controlled conditions. Proceedings of the Utah Academy of Sciences, Arts, and Letters 44: 339–343.
40. VICKERY, R.K., JR. 1967d. Ranges of temperature tolerance for germination of *Mimulus* seeds for diverse populations. Ecology 48:647–651.
41. VICKERY, R.K., JR., AND D.G. ANDERSON. 1967. Experimental hybridizations in the genus *Mimulus* (Scrophulariaceae). VI. Section *Erythranthe*. Proceedings of the Utah Academy of Sciences, Arts, and Letters 44: 321–333.
42. MIA, M.M., AND R.K. VICKERY, JR. 1968. Chromosome counts in section *Simiolus* of the genus *Mimulus* (Scrophulariaceae). VIII. Chromosome homologies of *Mimulus glabratus* and its allied species and varieties. Madroño 19:250–256.

43. VICKERY, R.K., JR. 1968a. Crossing barriers in *Mimulus*. Proceedings of the XII International Congress of Genetics, Tokyo, Japan 2:216–217.
44. VICKERY, R.K., JR. 1968b. Evolution by polyploidy and aneuploidy in the *Mimulus glabratus* complex [abstract]. Proceedings of the XII International Congress of Genetics, Tokyo, Japan 1:323.
45. VICKERY, R.K., JR., K.W. CROOK, D.W. LINDSAY, M.M. MIA, AND W. TAI. 1968. Chromosome counts in section *Simiolus* of the genus *Mimulus* (Scrophulariaceae). VII. New numbers in *M. guttatus*, *M. cupreus*, and *M. tilingii*. Madroño 19:211–218.
46. VICKERY, R.K., JR. 1969. Crossing barriers in *Mimulus*. Japanese Journal of Genetics 44 (Supplement 1): 325–336.
47. WILSON, K.G., R.K. VICKERY, JR., AND H.G. POLLOCK. 1969. Genetic investigations of the floral flavonoids in the *Mimulus cardinalis* complex [abstract]. Genetics 61:s64.
48. TAI, W., AND R.K. VICKERY, JR. 1970. Cytogenetic relationships of key diploid members of the *Mimulus glabratus* complex (Scrophulariaceae). Evolution 24: 670–679.
49. MCARTHUR, E.D., AND R.K. VICKERY, JR. 1970. Chromosome number reports on the Scrophulariaceae. Pages 801–802 in Åskell Löve, presenter, IOPB chromosome number reports 29. Taxon 19:801–802.
50. VICKERY, R.K., JR., AND W. TAI. 1970. Chromosome number reports on the Juncaginaceae and Scrophulariaceae. Page 442 in Åskell Löve, presenter, IOPB chromosome number reports 27. Taxon 19:437–442.
51. MCARTHUR, E.D., R.K. VICKERY, JR., AND ANDREW E. ANDERSON. 1971. Chromosome number reports on the Scrophulariaceae. Page 159 in Åskell Löve, presenter, IOPB chromosome number reports 31. Taxon 19:157–160.
52. VICKERY, R.K., JR. 1971. Jens C. Clausen. Genetics 68(Supplement):S96–S97.
53. FERRO, A.M., G.J. BALDWIN, AND R.K. VICKERY, JR. 1972. Floral flavonoids of the *Mimulus luteus* complex. Phytochemistry 11:1186–1188.
54. MCARTHUR, E.D., M.T. ALAM, F.A. ELDRIDGE II, W. TAI, AND R.K. VICKERY, JR. 1972. Chromosome counts in section *Simiolus* (Scrophulariaceae). IX. Polyploid and aneuploid patterns of evolution. Madroño 21: 417–420.
55. TAI, W., AND R.K. VICKERY, JR. 1972. Unusual cytological patterns in microsporogenesis and pollen development of evolutionary significance in the *Mimulus glabratus* complex (Scrophulariaceae). American Journal of Botany 59:488–493.
56. BLOOM, M., AND R.K. VICKERY, JR. 1973. Pattern partitioning of floral flavonoids in the *Mimulus luteus* complex. Phytochemistry 12:165–167.
57. VICKERY, R.K., JR. 1973a. Crossing relationships of three Utah populations of *Mimulus guttatus* (Scrophulariaceae). Proceedings of the Utah Academy of Sciences, Arts, and Letters 50:33–41.
58. VICKERY, R.K., JR. 1973b. Has a naturalized Scottish population of *Mimulus guttatus* evolved significant barriers to gene exchange with native North American populations? Proceedings of the Utah Academy of Sciences, Arts, and Letters 50:42–45.
59. VICKERY, R.K., JR. 1973c. *Mimulus wiensii* (Scrophulariaceae), a new species from western Mexico. Madroño 22:161–168.
60. ALAM, M.T., AND R.K. VICKERY, JR. 1974. Crossing relationships in the *Mimulus glabratus* heteroploidy complex. American Midland Naturalist 90:449–454.
61. HUGHES, K.W., AND R.K. VICKERY, JR. 1974. Patterns of heterosis and crossing barriers resulting from increasing genetic distance between populations of the *Mimulus luteus* complex. Journal of Genetics 61:235–245.
62. VICKERY, R.K., JR. 1974a. Crossing barriers in the yellow monkey flowers of the genus *Mimulus* (Scrophulariaceae). Pages 33–81 in R. Bogart, editor, Genetics Lectures Volume III. Oregon State University Press, Corvallis, OR.
63. VICKERY, R.K., JR. 1974b. Growth in artificial climates—an indication *Mimulus*' ability to invade new habitats. Ecology 55:796–807.
64. HUGHES, K.W., AND R.K. VICKERY, JR. 1975. Evolutionary divergence in closely related populations of *Mimulus guttatus* (Scrophulariaceae). Great Basin Naturalist 35:240–244.
65. HSU, S.S., AND R.K. VICKERY, JR. 1976. The pattern of esterase variation in the *Mimulus glabratus* complex (Scrophulariaceae). Great Basin Naturalist 36:81–85.
66. VICKERY, R.K., JR., F.A. ELDRIDGE II, AND E.D. MCARTHUR. 1976. Cytogenetic patterns of evolutionary divergence in the *Mimulus glabratus* complex. American Midland Naturalist 95:377–389.
67. VICKERY, R.K., JR. 1978. Case studies in the evolution of species complexes in *Mimulus*. Evolutionary Biology 11:405–507.
68. VICKERY, R.K., JR., E.D. MCARTHUR, AND S.P. PURCELL. 1978. Chromosome number reports on the Scrophulariaceae Page 223 in Åskell Löve, presenter, IOPB chromosome number reports 60. Taxon 27:223–231.
69. VICKERY, R.K., JR., Y.E. CHU, K. FINEMAN, AND S. PURCELL. 1981. Chromosome number reports on the Scrophulariaceae. Page 68 in Åskell Löve, editor, IOPB chromosome number reports 70. Taxon 30:68–80.
70. VICKERY, R.K., JR., M. SIMPSON, AND M. NELLESTEIN. 1981. Chromosome number reports on the Scrophulariaceae Page 68–69 in Åskell Löve, editor, IOPB chromosome number reports 70. Taxon 30:68–80.
71. VICKERY, R.K., JR., AND B.C. WULLSTEIN. 1981. A comparison of six taxonomic methods using section *Erythranthe* of the genus *Mimulus* [abstract]. XIII International Botanical Congress, Sydney, Australia. Page 142.
72. WASER, N.M., R.K. VICKERY, JR., AND M.V. PRICE. 1981. Seed dispersal and population differentiation in *Mimulus guttatus* [abstract]. Bulletin of the Ecological Society of America 62:172.
73. VICKERY, R.K., JR., S.A. WERNER, AND E.D. MCARTHUR. 1982. Chromosome number reports on the Scrophulariaceae. Page 360 in Åskell Löve, editor, IOPB chromosome number reports 75. Taxon 31:342–368.
74. WASER, N.M., R.K. VICKERY, JR., AND M.V. PRICE. 1982. Patterns of seed dispersal and population differentiation in *Mimulus guttatus*. Evolution 36:753–761.
75. VICKERY, R.K., JR. 1983. Plasticity and polymorphism in seed germination of *Mimulus guttatus* (Scrophulariaceae). Great Basin Naturalist 43:470–474.
76. VICKERY, R.K., JR. 1984. Biosystematics. Pages 1–24 in W.F. Grant, editor, Plant biosystematics. [A compendium of papers from the symposium "Plant Biosystematics: Forty Years Later," Montreal, Canada, July 1983.] Academic Press, Toronto, Canada.

77. VICKERY, R.K., JR., AND S.S. HSU. 1984. *Esterase* variation associated with elevation, latitude and ploidy level in populations of the *Mimulus glabratus* complex. *American Midland Naturalist* 111:96–104.
78. VICKERY, R.K., JR., S.A. WERNER, D.R. PHILLIPS, AND S.R. PACK. 1985. Chromosome counts in section *Simiolus* of the genus *Mimulus*. X. The *Mimulus glabratus* complex. *Madroño* 32:91–94.
79. VICKERY, R.K., JR., B.Y. KANG, T.K. MAC, S.R. PACK, AND D.R. PHILLIPS. 1986. Chromosome counts in section *Erythranthe* of the genus *Mimulus* (Scrophulariaceae). III. *Madroño* 33:264–270.
80. VICKERY, R.K., JR., D.R. PHILLIPS, AND P.R. WONSAVAGE. 1986. Seed dispersal in *Mimulus guttatus* by wind and deer. *American Midland Naturalist* 116: 206–208.
81. VICKERY, R.K., JR., AND B.M. WULLSTEIN. 1987. Comparison of six approaches to the classification of *Mimulus* section *Erythranthe* (Scrophulariaceae). *Systematic Botany* 12:339–364.
82. SUTHERLAND, S., AND R.K. VICKERY, JR. 1988. Trade-offs between sexual and asexual reproduction in the genus *Mimulus*. *Oecologia* 76:330–335.
83. VICKERY, R.K., JR., J.W. AJIOKA, E.S.C. LEE, AND K.D. JOHNSON. 1989. Allozyme-based relationships of the taxa of section *Erythranthe* (*Mimulus*). *American Midland Naturalist* 121:232–244.
84. VICKERY, R.K., JR. 1990a. Close correspondence of allozyme groups to geographic races in the *Mimulus glabratus* complex (Scrophulariaceae). *Systematic Botany* 15:481–496.
85. VICKERY, R.K., JR. 1990b. Pollination experiments in the *Mimulus cardinalis*–*M. lewisii* complex. *Great Basin Naturalist* 50:155–159.
86. VICKERY, R.K., JR., F. RAHMAN, S.R. PACK, AND T. MAC. 1990. Chromosome counts in section *Simiolus* of the genus *Mimulus* (Scrophulariaceae). XI. The *M. glabratus* complex, continued. *Madroño* 37:141–144.
87. VICKERY, R.K., JR. 1991. Crossing relationships of *Mimulus glabratus* var. *michiganensis* (Scrophulariaceae). *American Midland Naturalist* 125:368–371.
88. VICKERY, R.K., JR. 1992. Pollinator preferences for yellow, orange, and red flowers of *Mimulus verbenaceus* and *M. cardinalis*. *Great Basin Naturalist* 52:145–148.
89. SUTHERLAND, S., AND R.K. VICKERY, JR. 1993. On the relative importance of floral color, floral shape, and nectar rewards in attracting floral visitors to the genus *Mimulus*. *Great Basin Naturalist* 53:107–117.
90. VICKERY, R.K., JR. 1994. Variance and replenishment of nectar in wild and greenhouse populations of *Mimulus*. *Great Basin Naturalist* 54:212–227.
91. VICKERY, R.K., JR. 1995a. Speciation by aneuploidy and polyploidy in *Mimulus* (Scrophulariaceae). *Great Basin Naturalist* 55:174–176.
92. VICKERY, R.K., JR. 1995b. Speciation in *Mimulus*, or, can a simple flower color mutant lead to species divergence? *Great Basin Naturalist* 55:177–180.
93. VICKERY, R.K., JR. 1997. A systematic study of the *Mimulus wiensii* complex (Scrophulariaceae: *Mimulus* section *Simiolus*), including *M. yecorensis* and *minutiflorus*, new species from western Mexico. *Madroño* 44:384–393.
94. VICKERY, R.K., JR. 1999. Remarkable waxing, waning, and wandering of a population of *Mimulus guttatus*: an unexpected example of global warming. *Great Basin Naturalist* 59:112–126.
95. VICKERY, R.K., JR. 2008. How does *Mimulus verbenaceus* (Phymaceae) set seed in the absence of pollinators? *Evolutionary Biology* 35:199–207.