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TRYON MEMORIAL LECTURE.

Henry Tryon—First Hon. Secretary, Royal Society of Queensland, and his place in Queensland Science.

By C. T. White, Government Botanist, Brisbane.

(*Read before the Royal Society of Queensland, 30th October,* 1944; *issued separately, 25th June,* 1945.)

Henry Tryon, one of the outstanding personalities of the early scientific life of Queensland and a contemporary of such well-known figures as R. L. Jack, F. M. Bailey, Jos. Bancroft and C. W. De Vis, came to this State about 1882 and obtained his first official position as an assistant at the Queensland Museum in 1883. He was born at Buckfastleigh, South Devon, England, on 20th December, 1856, and died at Brisbane on 15th November, 1943.

After a primary education at Sherwood College, he became a medical student at the London Hospital, one of his instructors being the celebrated Ray Lancaster, for whom throughout his life he had the profoundest regard. Medicine, however, apparently did not appeal to the young man as a profession and he left the hospital before completing his course and turned towards the study of natural history. Tryon was a naturalist of the old school in the sense that he was interested in all branches of natural science and had a good working knowledge of geology, insects, shells, birds, plants and general zoology. The more exact parts of the natural sciences such as taxonomy and anatomy appealed to him more than the philosophical, and thus it was that Darwinism, with all its subsequent bearing on biological science, passed him by so that he always seemed quite unaware of its very existence. An indication of his outlook on science may well be ascertained from the subject of his presidential address before the Queensland Field Naturalists' club in 1908—"Linnaeus and Buffon." It was of their type that he was a great admirer.

One of his earliest exploits in natural history soon after leaving the medical school was to travel through Sweden following the tracks of the great Linnaeus collecting plants and insects, particularly the former. This was a great joy to him, and in later years he often lived this trip over again in memory.

Later he journeyed to New Zealand managing a grazing property for his father, but here again the love of nature called him away on a lengthy collecting tour, New Zealand hills having too strong a pull for him to resist. He became friendly with Thos. Kirk and paid special attention to the botany of New Zealand. It is pleasing to know that his collections, which were extensive, have found a permanent home in the Queensland State Herbarium, from where duplicates when available have been distributed to kindred institutions. New Zealand made a strong appeal to him and he always retained pleasant memories of the time spent there, and never lost his knowledge of the Maori language. The life of a grazier made no appeal to him, and hearing of the great possibilities of the sugar industry in North Queensland and wanting to do something fresh, he decided to come to this country. He travelled a great deal over much of North Queensland looking at sugar lands, but there was one life that Tryon was destined for, and that was the pursuit of natural science. In 1883 he received his first appointment as an assistant at the Queensland Museum, then under the directorate of C. W. De Vis. After some years as Assistant Curator at the Museum, Tryon was appointed, in 1894,

as Government Entomologist in the youthful Department of Agriculture, later Department of Agriculture and Stock, and in 1901 became also Government Plant Pathologist, holding the dual position until his retirement in 1929. During these years he published many records of insect, fungus and bacterial pests in his annual reports, which were mostly of a voluminous nature. One of his earliest Departmental reports was on the insect pests of the orange orchards of the Wide Bay district published as Bulletin No. 4 (2nd series) of the Queensland Department of Agriculture in 1894. Before this, however, and while he was Assistant Curator of the Queensland Museum, he was commissioned by the Government to visit the Darling Downs and report on the diseases of orchard trees and agricultural plants. The results of this were published as a parliamentary paper under the title of "Inquiry into Diseases affecting the Fruit Trees and other Economic Plants in the Toowoomba District." The Government, however, thinking this in the words of the then Secretary for Public Lands (Mr. Hume Black) "Too valuable to be confined to the shelves of a parliamentary library," decided to publish it as a special "Report on Insect and Fungus Pests No. 1" of the Department of Agriculture, 1889.

Tryon was a man of very keen eyesight and was fond of examining everything he picked up with a high power, small-field hand lens he invariably carried. He was an expert section-cutter with the ordinary hand razor, many of his sections I well remember having the appearance of being cut with a heavy sliding microtome. He was a man of very sharp scientific intellect, but unfortunately once he had made a discovery was not inclined to tackle the drudgery of writing up his results in a carefully prepared manuscript suitable for presentation to the scientific public. Thus it was that much was never published at all and other material was presented in a form scarcely worthy of its importance. In this connection it must be recognised that Tryon during the whole of his professional life for nearly fifty years was inundated with queries; before the days of stenographers and typewriters all of these had to be answered by hand, and many of his letters were almost scientific treatises in themselves.

From his arrival in the colony (now State) to almost the day of his death Tryon took an active part in the scientific life of Brisbane. He was the first Hon. Secretary of this Society, and Vol. i. of our Proceedings contains a paper on the "Savo Megapode" of the Solomon Islands by A. H. Kissack which was communicated by Henry Tryon and a short note by Tryon himself on "A Locust Plague on the Lower Herbert." The early volumes of this Society contain several papers by Tryon, but he ceased to contribute after a time, most of his work appearing in the publications of his own Department. After a lapse of many years, on 27th September, 1926, he again read a big paper before this Society on "Queensland Fruit Flies (Trypetidae), Series I.," which was published in Vol. xxxviii. of our Proceedings. This was the last big piece of research work Tryon published. He was elected an Honorary Life Member of the Society in 1929.

It is interesting to note that this Society, largely through the efforts of its early Hon. Secretary, was able in 1888 to send H. O. Forbes, the well-known naturalist-explorer, the sum of £100 in aid of his work in New Guinea. Forbes, though a capable naturalist and well known for his work in Sumatra, Timor and some of the lesser known islands of the Malay Archipelago, had great difficulty in financing this expedition to New Guinea, and in consequence his travelling in that country was much

and especially in India and Ceylon." There is no doubt, I think, that the suggestion eventually led to the appointment soon after (1912) by the Queensland Government of a travelling commission comprising T. Harvey Johnston (chairman), H. Tryon (member) and C. W. Holland (secretary) to visit the many countries where prickly-pears were indigenous or had been introduced and become naturalised, and to investigate means of control that might be applied in Australia. In "The Biological Campaign against Prickly Pear," published in 1940 under the authority of the Prickly Pear Board, A. P. Dodd, officer in charge of Scientific Investigations, stated: "The commission spent eighteen months in visiting the many countries where prickly-pears were indigenous or had become acclimatised, and in its subsequent comprehensive and most valuable report made definite recommendations for the introduction under safeguards of certain insects and diseases from America. During its travels the commission forwarded to Australia from Ceylon small stocks of the cochineals, *Dactylopius ceylonicus* and *D. greeni*; the former insect was successfully reared by Dr. Jean White-Haney at the Dulacca Experiment Station, was liberated in the field, and in the space of a few years almost completely destroyed the scattered areas of *Opuntia monacantha.* At this stage it should be mentioned that among the prickly-pear insects encountered by the travelling commission was *Cactoblastis cactorum,* larvae of which were found in the Botanic Gardens at La Plata, Argentine. Mr. Tryon actually brought some of the caterpillars alive to Brisbane, but failed to rear them through to the adult stage. Had this effort been successful, the control of prickly-pear may well have been brought about years earlier than has been the case."

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A NEW CERIOIDES WITH FOLDING WINGS (Diptera-Syrphidae).

By G. H. Hardy.

(*Received* 18*th October,* 1944; *accepted for publication,* 27*th November,* 1944; *issued separately,* 25*th June,* 1945.)

Genus Cerioides Rond.

Between 1922 and 1927, Shannon divided this genus giving names that do not appear applicable to the Australian fauna. Ferguson (1926) applied three of these names, pointing out that not all characters cited by Shannon are present and there now seems to be no justification for separating *C. breviscapa* Saund. from *C. subarmata* C. & B. on characters used for the purpose; indeed they evidently form a natural group together with the new species described below. Thus only two groups can be retained to accommodate the Australian *Cerioides* until such times as the world's forms become better known. Of the twelve species hitherto described, six belong to the *breviscapa*-group, distinguished by the constriction near the base of the abdomen being excessive and wasp-like, and to this group the new species is added below. The *ornata*-group has but a slightly constricted abdomen.

Cerioides breviscapa-group.

The two species which I myself have captured in the bush, had their wings folded longitudinally when at rest, a character reported by me in 1933, and I would suggest that all species with the character belong to one natural group, but it is uncertain as to how far this extends in the group as at present understood. The character is readily overlooked as the flexure neither occurs readily when in the relaxed condition, nor is the flexure retained at death. The wing is flexed upwards, bringing the halves, rear above fore, to lie in parallel planes and not touching. Seen from above, the line of flexure shows three straight lines meeting at two points, forming two obtuse angles. This line of flexure has been traced by Mr. Edgar Riek and myself, using a freshly captured specimen of *C. subarmata,* caught by Mr. Riek on the large swamp at Sunnybank in August 1944, and this assures that on all pinned specimens with a wing folded, the feature is identical with that of the living state.

The line of flexure runs at least half way along the anterior margin of the alula, which normally is hinged to turn upwards on many flies, then passes at an angle to a deep crease just behind the median vein,

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and continues along this crease through the depression at the furcation of the median vein, continuing without altering its course out of the end of the crease passing over the intervening bend of the median vein to the wing margin; this last portion shows the wing to be, not angular as at the crease, but bowed, and leaves no mark to indicate the course; and further the surface is bowed between the alula and the crease, again leaving no mark when the wing is flattened.

KEY TO SPECIES OF THE BREVISCAPA-GROUP.

1.	Wings with the normal dip in the radial vein	2
	Wings without this dip in the radial vein. Male with the short form of antennal tubercle and the long form of the second abdominal segment. Female with the long form of antennal tubercle and the short second abdominal segment ..	*alaplicata* n.sp.
2.	With the brown in the radial area covering the dip..	3
	With the brown of the wing much reduced and not entering the dip	6
3.	Antennal tubercle and second abdominal segment short in both sexes	*breviscapa* Saunders.
	Antennal tubercle long	4
4.	Face black in the median area, but a thin greyish obscure median line may divide the black area longitudinally	5
	With the median facial line yellow. Second abdominal segment long. Male not known	*fascialis* Ferguson.
5.	Second abdominal segment long; female not known ..	*subarmata* Curran & Bryan.
	Second abdominal segment short; male not known ..	*mastersi* Ferguson.
6.	Thorax with vittae. Frons pitted on female. Second abdominal segment long	*macleayi* Ferguson.
	Thorax without vittae. Frons not pitted. Second abdominal segment short. Male not known ..	*doddi* Ferguson.

Characters given in the key are taken from descriptions, as the material available for study is insufficient for a full revision. It will be noted that not only does sexual dimorphism occur within the group, but also the males of three species are unknown, as also the female of one; hence it may be considered that *subarmata* and *mastersi* are opposite sexes of the same species, but colour marks and their respective habitats differ so widely that they cannot be conspecific.

CERIOIDES BREVISCAPA Saunders.

Ceria breviscapa Saunders 1845.—*Cerioides victoria* Curran 1925.

Ferguson overlooked this synonymy and neither he nor I had seen Victorian specimens, but judged the identity from specimens found in New South Wales. As markings are liable to variation in this group, such small discrepancies as those found in the descriptions are not important enough, nor sufficient in number, to permit acceptance of more than one species. Moreover, the genus is mainly a northern one,