Dear Sirs,

In a recent issue of your Journal (Vol. 27, no. 1, pp. 8–12, 1973) Professor Sargent concludes his short article with the following statement, ". . . numerous other experimental results (Sargent, 1968, 1969a and b) fail to support the reflectance matching mechanism proposed by Kettlewell (1955) and Ford (1964) to explain the selection of appropriate backgrounds by bark-like moths. On the contrary all of the evidence to date supports the view that these background selections are genetically fixed or innate responses."

I would like to ask one simple question: if in fact this statement is true, I would like Professor Sargent's views as to how the two morphs of *Biston betularia* (f. *typica* and its melanic f. *carbonaria*) succeed so well in correct choice of backgrounds—two very different ones.

Yours sincerely, DR. H. B. D. KETTLEWELL Department of Zoology—Genetics Unit South Parks Road Oxford, England

ED. NOTE: Since my views are solicited, I would suggest that the two morphs of *Biston betularia* differ both at the loci controlling the visible expression of melanism and at loci controlling background resting preference. I would assume that the different background preferences of the two morphs are fixed or innate, in the sense of being unmodifiable during the life of the insect. In such a situation, one would expect the evolution of mechanisms, such as the formation of supergene complexes, to insure that each morph inherits the appropriate background preference.

OBITUARY

KENNETH JOHN HAYWARD (1891–1972)

Kenneth John Hayward was born on March 7th, 1891 in the small village of Pitney, near Taunton, in Somerset. At the age of eighteen he was already earning a living in London as an electrician, and by 1912 he was working on the Aswan dam in Egypt in the same capacity. He joined the forces soon after the outbreak of war in 1914, serving in France, Greece and Cyprus, and returning to Aswan with the rank of Captain in 1919. In 1922 he returned to London and eventually secured a post as an engineer with the land-owning Argentine La Forestal company, which he took up in 1923 and held till 1929. It was during these years that he spent at Villa Ana and elsewhere in the Chaco that he amassed the very large collections that he presented almost in their entirety to the British Museum (Natural History), to be added to those he made whilst in Egypt.

About 1930 he became associated with Albert and Adolph Breyer, both keen entomologists, working with them at Patquia, La Rioja, Argentina. His status as an entomologist, however, was only realized beyond doubt when in 1934 he was appointed in that capacity to the Agricultural



Experiment Station of Concordia in Entre Rios, Argentina. From there in 1940 he transferred to the Agricultural Experiment Station at Tucumán, where his wanderings ceased. Here in 1944 he joined the Instituto-Fundación Miguel Lillo of the National University of Tucumán, which conferred an honorary doctorate on him in 1950. Of recent years he enjoyed the title of Professor Emeritus. He died in Tucumán on May 21st, 1972.

Hayward was a rather tall, spare man, somewhat reserved and seeming to be under tension from the sheer volume of work he always had in hand. At one time I used to receive from him with the greatest regularity, and much too frequently for my peace of mind, parcels of specimens and long numbered lists upon which I was required to fill in their names. I was unable to keep pace. Undeterred, he turned to others to supplement his identification service. It was only when, by these means, he had secured a firm basis that he began to make worthwhile contributions to our knowledge of the entomological fauna of the Argentine Republic.

I don't know enough about his publications to be able to evaluate them, but when I was Editor of the *Entomologist* (and ever since then) he regularly sent me notes on butterfly migrations in Argentina. W. H. Evans thought well of his work on Hesperiidae, considering the relatively limited facilities available to him.

I am told that he was married, but "separated many years ago" and that he had a married daughter living in England with a son now at University. An obituary was published by one of his associates, Dr. Willink, in *Physis* 81: 83 and another appeared in "La Gacete" S.M. de Tucumán, May 22nd.

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