

COMMENTARY ON *J. GENET.* CLASSIC

Punnett and duck genetics

(A commentary on R. C. Punnett 1932 *J. Genet.* **25**, 191–194;
reprinted in this issue as a *J. Genet.* classic, pages 3–7)

K. VIJAYRAGHAVAN*

*National Centre for Biological Sciences, Tata Institute of Fundamental Research, GKVK,
Bangalore 560 065, India*

The classic we reprint in this issue is by one of the journal's founders, R. C. Punnett. The note, published in February 1932, starts with Punnett explaining that he started his work on ducks as he was asked by breeders to find a down character that showed sex linkage. Sexing the young of poultry is difficult. Genetics therefore appeared to afford an 'easy' solution that could be of much economic importance. Punnett was successful in his efforts by analysing reciprocal crosses between the Mallard and Indian Runner duck. Interestingly, he does not restrict his observations to the colour but also comments on the behaviour of the hybrids. Although Punnett does not discuss behaviour and genes, this comment by a geneticist on behaviour is interesting, particularly in the context of Punnett's later comments on genes and human mental disease.

Punnett's name is known to high-school students for the eponymous 'square' but few geneticists today can state his other important contributions. This may well be the consequence of Punnett being a modest man, who was not a self-publicist or one who bothered about priority: much has been written about major geneticists of the early 20th century, but rather little, in comparison, about Punnett.

All this and more about Punnett are very well recounted in a biography by F. A. E. Crew (1967; also available online through JSTOR, see URL below, restricted access). This biography has many gems about the early days of genetics and could well be worth reprinting in a future issue of the journal.

Before you go on to read this simple and clearly written classic two points from Crew's biography are worth keeping in mind. First, although Punnett's work on poultry genetics had great economic importance, he left the details of this side of genetics to others. He was quite simply interested in using poultry to study genetics, not in applying genetics to the improvement of poultry. A sense of this can be seen at the end of his note. Second, and this is not evident from the note, is the value of playing cricket. We apparently owe the Hardy–Weinberg law to Punnett asking Hardy, with whom he played cricket, to solve a question on the distribution of phenotypes in populations.

Reference

- Crew F. A. E. 1967 Reginald Crundall Punnett. 1875–1967. *Biogr. Mem. Fellows R. Soc.* **13**, 309–326. Available online through JSTOR (restricted access) at URL <http://links.jstor.org/sici?sici=0080-4606%28196711%2913%3C309%3ARCP1%3E2.0.CO%3B2-B>. (Note: No break within URL.)

*Email: vijay@ncbs.res.in.