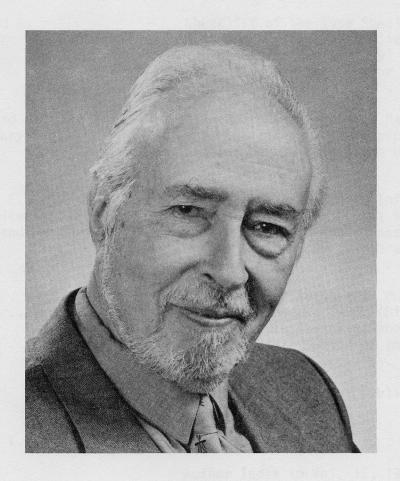
THE MAN WE HONOR



DR. J. DAVID GILLETT, O.B.E., D.Sc.

Biography of John David Gillett

Professor Gillett was born in northeast London at 0910 h on 8 September, 1913, twenty minutes after the birth of his monoclonal counterpart. His early memories date from 1915 (convalescing from scarlet fever) and the years immediately following (sheltering from the zeppelin raids).

At school he excelled in natural history and music but failed dismally in everything else. Indeed he claims to be the only pupil in the 450 years' history of the school to have taken nine 0-level subjects and failed in every single one - even his twin brother passed in two! With this distinctly non-valedictorian start he left school in 1930 and on 8 September the same year was taken on in a very junior capacity in P. A. Buxton's department of medical entomology at the London School of Hygiene and Tropical Medicine. Later that year he patented one invention and over the following six years published seven papers, four of them jointly with the Reader in the department, V. B. Wigglesworth (now Professor Sir Vincent Wigglesworth).

In 1936, Gillett was chosen to accompany H. S. Leeson to East Africa in a study of the *Anopheles funestus* complex as it was then understood (*An. leesoni* and *An. rivulorum* had already been split off as separate species). Together they visited almost all parts of Uganda, Tanganyika, Zanzibar and Pemba and parts of Kenya too. They flew out to Africa when the scheduled flight time from London to Entebbe was 5 1/2 days.

Gillett stayed on as a field assistant in the Medical Department of Uganda and held a Uganda passport for the next 26 years. He was engaged largely on control of malaria, bubonic plague and sleeping sickness. In 1940, on his way back from visits to Sumatra, Java, Singapore, New Guinea, New Britain, New Zealand and Australia, he was taken to see the work then going on to control An. culicifacies in Ceylon (now Sri Lanka).

In 1941, an outbreak of yellow fever occurred in western Uganda and he was seconded to the Rockefeller Foundation's Yellow Fever Institute to work in Bwamba on the old Congo border, a curious never-never land sandwiched between the Ruwenzori mountains towering almost 17,000 feet to the East and the great Ituri Forest stretching almost unbroken then for some 1,200 miles to the West. He took part in the first isolations of YF virus in East Africa, one from a human case and three from the mosquito Aedes simpsoni, the first mosquito other than Ae. aegypti to be incriminated in a natural outbreak of yellow fever in the continent of Africa.

In the following year, A. J. Haddow joined the team and together they untangled the extrahuman cycle of YF in Africa involving monkeys and the crepuscular tree-top mosquito Ae. africanus. They organized continuous 24 hour catches of mosquitoes at five levels simultaneously from ground level to the forest canopy over a period of 40 days and 40 nights.

In January, 1943, David Gillett married Irena Charzewska (who had just been freed from forced labor somewhere North of Tibet). They spent an extended "honeymoon" of a year on Buvuma Island, a large populated island in Lake Victoria. All very romantic in retrospect but the steady advance of human sleeping sickness across the island made it seem somewhat less so at the time. At any rate, it provided an opportunity to learn each other's languages. Later, with Haddow, they climbed one of the high snow peaks of the Ruwenzori, reaching the top on their 1st wedding anniversary, 10 days after setting off.

Gillett then returned to England to take up his studies where he had so ignominiously left them 15 years earlier. Having first taken those 0-levels again and then on to the A-levels he was accepted at University College (University of London) to read Zoology, Physiology and Biochemistry. He graduated in 1949, with first class honors and returned to Uganda with his wife and two children to rejoin Haddow at what had in the interim become the East African Virus Research Institute.

On his return to Uganda Gillett showed that both Ae. simpsoni and Ae. aegypti in Africa occur as man-biting and non-man-biting populations and demonstrated how these behavior differences are correlated with the pattern of endemicity of human yellow fever in Africa. He went on to show that many other behavioral differences between strains of Ae. aegypti have a genetic origin. He also studied the behavior of various viruses within the mosquito host paying particular attention to YF, Uganda S, Rift Valley fever, Semliki Forest, Ntaya, Zika and EMC viruses. Describing the crippling epidemic of chikungunya in his book "Mosquitoes" he alluded to a human volunteer to provide the coup de grace of mosquito transmission but forgot to add that the volunteer was the author of the book. Later he was in charge of operations during the epidemic of o'nyong-nyong, the largest outbreak of insect transmitted human virus disease ever recorded.

Early in this period he made a detailed study of the old problem of erratic hatching in *Aedes* eggs and, having shown that this phenomenon has a genetic component, submitted the results as an unsupervised thesis for the Ph.D. (London) in 1952, his oral examiners being Professor Buxton and Sir Vincent Wigglesworth.

In 1955, Gillett was awarded a Rockefeller Foundation Fellowship to study mosquito virus relations in the United States. He audited the first semester in epidemiology and biostatistics at Berkeley and carried out field work on WEE and St. Louis viruses with Bill Reeves at Bakersfield. Later he collaborated with Roy Chamberlain and W. D. Sudia at the C.D.C. at Montgomery, Alabama and studies under L. E. Rozeboom at Johns Hopkins and Max Theiler at the Rockefeller Laboratories in New York. He also visited Cornelius B. Philip at the virus laboratory in Hamilton, Montana.

After his return to Uganda he was appointed Assistant Director to Alec Haddow at the E. A. Virus Research, where they collaborated in a study of periodic behavior in mosquitoes. Entebbe was even more of a backwater then than it is today and it is interesting to record that Gillett and Haddow (later joined by Philip Corbet), largely isolated from the mainstream work that

was going on elsewhere on circadian rhythms, independently came to much the same conclusions, showing how the phase of the inherited rhythm was set by the change from light to dark on the day before.

Gillett also studied hormonal mechanisms in mosquitoes and was among the first to establish that egg development was set in train by a neurosecretory hormone (now known as EDNH) released from the brain some eight hours after the taking of a blood meal. He was awarded the D.Sc. from London in 1960, and shortly afterwards visited West Malaysia to look at the transmission of filariasis with R. H. Wharton. He also visited Ramachandra Rau and Harold Trapido at the Virus Laboratories in Poona, India, and in 1961, made the first of many visits to Thailand before going on to Japan to attend the International Symposium on Comparative Endocrinology.

Over the years, Irena and David entertained in their home at Nakiwogo, two miles outside Entebbe, many people whose names are well known to readers of this journal, among whom may be mentioned A. W. A. Brown, F. J. C. Cambournac, G. Craig, W. Downs, P. C. C. Garnham, M. T. Gillies, D. J. Lewis, G. Macdonald, P. F. Mattingly, G. A. H. McClelland, O. W. Richards, Sir Peter Scott, Jaswant Singh, E. C. C. van Someren, C. Teesdale and J. de Zulueta.

In 1962, he returned to Britain to take up the Chair of Applied Biology at the new Brunel University, west of London, later becoming Head of Biological Sciences. He established what had long been close to his heart, that is an honors course with the various aspects of biology (botany, microbiology, physiology and zoology, including entomology) gathered round a central core of biochemistry, where all meet on common ground. He was appointed Pro-Vice-Chancellor of the University in 1975, and retired three years later at the normal age of 65.

During the 16 years at Brunel he not only visited Thailand for WHO and SEATO but went for five months as project leader to set up the new WHO Aedes Research Unit in Dar es Salaam. He returned to Tanzania to work in the new unit in 1969, and renewed his acquaintance with Chris Teesdale and Andy McClelland than project leader and first made the acquaintance of Milan Trpis, Keith Hartberg, Gene Gerberg and Graham White. In 1977, Gillett again returned to East Africa as external examiner in entomology at Nairobi, 41 years after his first visit to that city; he returned to Nairobi again in 1978 and 1979.

On retiring from Brunel in 1978, he was offered a three year research fellowship by the British Medical Research Council and was invited to return to the London School of Hygiene and Tropical Medicine by Bill Macdonald (Professor of Entomology at the time); clearly an offer he could not refuse. He is still at the School (now aged 71) working on diuresis in unfed mosquitoes and occupies the very room in which he underwent the *viva voce* under Buxton and Wigglesworth 32 years earlier.

After serving two years as Treasurer he was elected President of the Royal Entomological Society of London (1977-79). Earlier he had served on the council of that Society and on that of the Royal Society of Tropical Medicine and Hygiene. He gave the first AMCA Memorial Lecture (now an annual event) in

Washington in 1979. But the honor which he most treasures is the dedication of a string quartet to David Gillett and his wife Irena in 1979. The second movement of this long work by Robert Simpson is a little scherzo entitled "Molto vivace <code>Eretmapodites gilletti."</code> The work has just been recorded by Hyperion and when Gillett was asked if this is what mosquitoes sound like replied "No, but it's what they behave like."

He has three times flown round the world, crossing the Americas via Rio de Janeiro, Washington and Alaska, respectively. He is now vice-chairman of the Airship Association of Great Britain.

Only a small part of Gillett's output has been concerned with systematics but his book "Common African Mosquitoes" with each species described and beautifully illustrated in color by entomologist/artist Dr. Judith Smith, goes some way at making amends. This book is aimed at the African worker to whom English is a foreign language and whose prowess at reading specialist literature may thus be severely limited.

David and Irena celebrated their 40th wedding anniversary two years ago. Their surviving family includes Richard and his Canadian wife, Kathryn, and Caroline and her husband, Steven McCabe. Richard read Natural Sciences at Cambridge University and then went on to qualify in medicine at London and in Psychiatry at Edinburgh. There is one granddaughter (Zoe) and three grandsons (Keith, Arthur and Alexander).

Meanwhile, David and Irena live at Bourne End, about 30 miles west of London in the Thames Valley. He rises at 0510 every day of the week but usually manages to catnap during the day (20 minutes at midday and 40 minutes in the evening) to give a total of six hours sleep per twenty-four hours. He works four days a week plus one night at the London School and then enjoys a three-day weekend. Thus, he argues in a somewhat Eulenspiegelian fashion, he manages an eight day week - "an extra day per week at this stage is no bad thing, especially," as he says, "when you enjoy life as much as I do."

LIST OF PUBLICATIONS

1932-1985

<u>Papers</u>

- 1. Gillett, J. D. 1932. Climbing organ on a Reduviid bug. The Entomologist 65:123.
- Gillett, J. D. and V. B. Wigglesworth. 1932. The climbing organ of an insect, Rhodnius prolixus (Hemiptera: Reduviidae). Proc. R. Soc. B. 111:364-376.
- 3. Wigglesworth, V. B. and J. D. Gillett. 1934. The function of the antennae in *Rhodnius prolixus* (Hemiptera) and the mechanism of orientation to the host. Journ. Exp. Biol. 11:120-139.

- 4. Wigglesworth, V. B. and J. D. Gillett. 1934. The function of the antennae in *Rhodnius prolixus*; confirmatory experiments. Journ. Exp. Biol. 11: 408.
- 5. Gillett, J. D. 1934. Colour variation of *Triatoma rubrofasciata*. Proc. R. Ent. Soc. Lond. 9:4-5.
- 6. Gillett, J. D. 1935. The genital sterna of the immature stages of *Rhodnius prolixus* (Hemiptera). Trans. R. Ent. Soc. Lond. 83:1-5.
- 7. Wigglesworth, V. B. and J. D. Gillett. 1936. The loss of water during ecdysis in *Rhodnius prolixus* Stal (Hemiptera). Proc. R. Ent. Soc. Lond. (A) 11:104-107.
- 8. Gillett, J. D. 1942. A larvascope for use in identification of living culicine larvae. Bull. Ent. Res. 33:27-29.
- 9. Mahaffy, A. F., K. C. Smithburn, H. R. Jacopx and J. D. Gillett. 1942. Yellow fever in western Uganda. Trans. R. Sox. Trop. Med. Hyg. 36: 9-20.
- 10. Gillett, J. D. 1945. The larva and pupa of *Taeniorhynchus (Coquillettidia)*maculipennis, Theobald. Bull. Ent. Res. 35:395-397.
- 11. Gillett, J. D. 1946. Notes on the subgenus *Coquillettidia* Dyar (Diptera, Culicidae). Bull. Ent. Res. 36:425-438.
- 12. Haddow, A. J., J. D. Gillett, and R. B. Highton. 1947. The mosquitoes of Bwamba County, Uganda. V. The vertical distribution and biting-cycle of mosquitoes in rain-forest, with further observations on microclimate. Bull. Ent. Res. 37:301-330.
- 13. Smithburn, K. C., J. J. Haddow and J. D. Gillett. 1948. Rift Valley fever. Isolation of the virus from wild mosquitoes. Brit. J. Exp. Path. 29: 107-121.
- 14. Gillett, J. D. 1949. Further notes on the Ethiopian species of Taeniorhynchus Arribalzaga (Diptera, Culicidae). Proc. R. Ent. Soc. Lond. (B) 18:97-102.
- 15. Haddow, A. J., J. D. Gillett, A. F. Mahaffy and R. B. Highton. 1950.

 Observations on the biting-habits of some Tabanidae in Uganda, with special reference to arboreal and nocturnal activity. Bull. Ent. Res. 41:209-221.
- 16. Gillett, J. D., R. W. Ross, G. W. A. Dick, A. J. Haddow and L. E. Hewitt.
 1950. Experiments to test the possibility of transovarial transmission of yellow fever virus in the mosquito *Aedes (Stegomyia) africanus*Theobald, Ann. Trop. Med. Parasit, 44:342-350.

- 17. Ross, R. W. and J. D. Gillett. 1950. The cyclical transmission of yellow fever virus through the grivet monkey, *Cercopithecus aethiops centralis* Neumann, and the mosquito *Aedes (Stegomyia) africanus* Theobald. Ann. Trop. Med. Parasit. 44:351-356.
- Haddow, A. J., E. C. C. van Someren, W. H. R. Lumsden, J. O. Harper and J. D. Gillett. 1951. The mosquitoes of Bwamba County, Uganda. VIII. - Records of occurrence, behaviour and habitat. Bull. Ent. Res. 42:207-238.
- 19. Gillett, J. D. 1951. The habits of the mosquito *Aedes (Stegomyia)*simpsoni Theobald in relation to the epidemiology of yellow fever in Uganda. Ann. Trop. Med. Parasit. 45:110-121.
- 20. Gillett, J. D. 1951. The larva, pupa and adult male of *Aedes (Stegomyia)***ruwenzori Haddow and van Someren (Diptera, Culicidae). Ann. Trop.

 Med. Parasit. 45:195-198.
- 21. Gillett, J. D. and R. W. Ross. 1953. The laboratory transmission of yellow fever by the mosquito *Aedes (Stegomyia) strelitziae* Muspratt. Ann. Trop. Med. Parasit. 47:367-370.
- 22. Gillett, J. D. 1955. Variation in the hatching-response of *Aedes* eggs (Diptera: Culicidae). Bull. Ent. Res. 46:241-254.
- 23. Gillett, J. D. 1955. The inherited basis of variation in the hatchingresponse of *Aedes* eggs (Diptera: Culicidae). Bull. Ent. Res. 46: 255-265.
- 24. Gillett, J. D. and R. W. Ross. 1955. The laboratory transmission of yellow fever by *Aedes (Stegomyia) aegypti* (Linnaeus) from Malaya. Ann. Trop. Med. Parasit. 49:63-65.
- 25. Gillett, J. D. 1955. Further studies on the biting behaviour of *Aedes* (Stegomyia) simpsoni Theobald in Uganda. Ann. Trop. Med. Parasit. 49:154-157.
- 26. Gillett, J. D. 1955. Behaviour differences in two strains of *Aedes aegypti*. Nature, Lond. 176:124.
- 27. Gillett, J. D. 1955. The male of *Anopheles (Myzomyia) distinctus* var. *ugandae* Evans (Diptera: Culicidae). Proc. R. Ent. Soc. Lond (B) 24:36.
- 28. Gillett, J. D. 1956. Genetic differences affecting egg-laying in the mosquito *Aedes (Stegomyia) aegypti* (Linnaeus). Ann. Trop. Med. Parasit. 50:362-374.
- 29. Gillett, J. D. 1956. Initiation and promotion of ovarian development in the mosquito *Aedes (Stegomyia) aegypti* (Linnaeus). Ann. Trop. Med. Parasit. 50:375-380.

- 30. Gillett, J. D. 1957. On the habits and life history of captive Emesine bugs (Hemiptera: Reduviidae). Proc. R. Ent. Soc. Lond. (A) 32: 193-195.
- 31. Gillett, J. D. 1957. Age analysis in the biting-cycle of the mosquito Taeniorhynchus (Mansonioides) africanus Theobald, based on the presence of parasitic mites. Ann. Trop. Med. Parasit. 51:151-158.
- 32. Haddow, A. J. and J. D. Gillett. 1957. Observations on the oviposition cycle of *Aedes (Stegomyia) aegypti* (Linnaeus). Ann. Trop. Med. Parasit. 51:159-169.
- 33. Gillett, J. D. and A. J. Haddow. 1957. Laboratory observations on the oviposition-cycle in the mosquito *Aedes (Stegomyia) africanus*Theobald. Ann. Trop. Med. Parasit. 51:170-174.
- 34. Gillett, J. D. 1957. Variation in the time of release of the ovarian development hormone in *Aedes aegypti*. Nature, Lond. 180:656-657.
- 35. Gillett, J. D. 1958. Laboratory tests on the maintenance of yellow fever virus in certain predatory arthropods. Trans. R. Soc. Trop. Med. Hyg. 52:269-271.
- 36. Gillett, J. D. 1958. Laboratory colonisation of the mosquito, Eretmapodites chrysogaster Grah. Bull. Ent. Res. 49:287-290.
- 37. Gillett, J. D. 1958. Induced ovarian development in decapitated mosquitoes by transfusion of haemolymph. J. Exp. Biol. 35:685-693.
- 38. Gillett, J. D., A. J. Haddow and P. S. Corbet. 1959. Observations on the oviposition-cycle of *Aedes (Stegomyia) aegypti* (Linnaeus). II. Ann. Trop. Med. Parasit. 53:35-41.
- 39. Chamberlain, R. W., W. D. Sudia and J. D. Gillett. 1959. St. Louis encephalitis virus in mosquitoes. Amer. J. Hyg. 70:221-236.
- 40. Gillett, J. D., P. S. Corbet and A. J. Haddow. 1959. Observations on the oviposition-cycle of *Aedes (Stegomyia) aegypti* (Linnaeus). III. Ann. Trop. Med. Parasit. 53:132-136.
- 41. Haddow, A. J., J. D. Gillett and P. S. Corbet. 1959. Laboratory observations on pupation and emergence in the mosquito Aedes (Stegomyia) aegypti (Linnaeus). Ann. Trop. Med. Parasit. 53:123-131.
- 42. Gillett, J. D. 1959. Control of hatching in the prediapause eggs of *Aedes* mosquitoes. Nature, Lond. (184) 1621-1623.
- 43. Corbet, P. S., A. J. Haddow and J. D. Gillett. 1960. Observations on the oviposition-cycle of *Aedes (Stegomyia) aegypti* (Linnaeus). IV. Ann. Trop. Med. Parasit. 54:156-164.

- 44. Haddow, A. J., P. S. Corbet and J. D. Gillett. 1960. Laboratory observations on the oviposition-cycle in the mosquito *Aedes* (*Stegomyia*) apicoargenteus Theobald. Ann. Trop. Med. Parasit. 54: 392-396.
- 45. Haddow, A. J., J. D. Gillett and P. S. Corbet. 1961. Observations on the oviposition-cycle of *Aedes (Stegomyia) aegypti* (Linnaeus). V. Ann. Trop. Med. Parasit. 343-356.
- 46. Haddow, A. J., P. S. Corbet and J. D. Gillett. 1961. Entomological studies from a high tower in Mpanga Forest, Uganda. Trans. R. Ent. Soc. Lond. 113:249-256.
- 47. Corbet, P. S., M. C. Williams and J. D. Gillett. 1961. O'nyong-nyong fever: an epidemic virus disease in East Africa. IV. Vector studies at epidemic sites. Trans. R. Soc. Trop. Med. Hyg. 55:463-480.
- 48. Gillett, J. D. 1961. Laboratory ovservations on the life-history and ethology of *Mansonia* mosquitoes. Bull. Ent. Res. 52:23-30.
- 49. Gillett, J. D. 1961. Cyclical feeding-activity in colonized mosquitoes. Nature, Lond. 190:881-883.
- 50. Woodall, J. P., J. D. Gillett, P. S. Corbet, M. P. Weinbren and M. C. Williams. 1961. The isolation of West Nile virus from the bird-biting mosquito *Mansonia metallica* in Uganda. Ann. Trop. Med. Parasit. 55:398-402.
- 51. Gillett, J. D., P. S. Corbet and A. J. Haddow. 1961. Observations on the oviposition-cycle of *Aedes (Stegomyia) aegypti* (Linnaeus). VI. Ann. Trop. Med. Parasit. 55:427-431.
- 52. Gillett, J. D. 1962. Resistance to desiccation in six strains of the Culex pipiens complex. Mosquito News 22:342-345.
- 53. Gillett, J. D., A. J. Haddow and P. S. Corbet. 1962. The sugar-feeding cycle in a cage-population of mosquitoes. Ent. Exp. & Appl. 5:223-232.
- 54. de Zulueta, J., J. P. Woodall, J. R. Cullen, M. C. Williams, G. W. Kafuko and J. D. Gillett. 1962. An observation on the possible effect of o'nyong-nyong fever on malaria. Bull. Wld. Hlth. Org. 62:135-139.
- 55. Gillett, J. D. 1962. Contributions to the oviposition-cycle by the individual mosquitoes in a population. J. Ins. Physiol. 8:665-681.
- 56. Gillett, J. D. 1964. Culturing methods for *Eretmapodites* mosquitoes. Bull. Wld. Hlth. Org. 31:449.

- 57. Gillett, J. D. 1964. Studies on the cyclic behaviour of mosquitoes.
 Proc. Seventh Inter. Cong. Trop. Med. and Malaria 5:39-40.
- 58. Williams, M. C., J. P. Woodall and J. D. Gillett. 1965. O'nyong-nyong fever: an epidemic virus disease in East Africa. VII. Virus isolations from man and serological studies up to July 1961. Trans. R. Soc. Trop. Med. Hyg. 59:186-197.
- 59. Gillett, J. D. 1965. Analysis of the overall laying-cycle in a population of insects. Proc. 12th Int. Congr. Ent. 12:789-790.
- 60. Williams, M. C., J. P. Woodall, P. S. Corbet and J. D. Gillett. 1965.
 O'nyong-nyong fever: an epidemic virus disease in East Africa. VIII.
 Virus isolations from *Anopheles* mosquitoes. Trans. R. Soc. Trop.
 Med. Hyg. 59:300-306.
- 61. Gillett, J. D. 1966. The role of temperature in the ecology of mosquitoes. J. Anim. Ecol.
- 62. Jones, M. D. R., M. G. Ford and J. D. Gillett. 1966. Light-on and light-off effects on the circadian flight activity in the mosquito Anopheles gambiae. Nature, Lond. 211:871-872.
- 63. Gillett, J. D. 1967. Natural selection and feeding speed in a blood-sucking insect. Proc. R. Soc. B. 167:316-329.
- 64. Gentle, T. A., W. N. Beesley and J. D. Gillett. 1968. Trials with sulphaquinoxaline as a systemic insecticide against adult mosquitoes. Ann. Trop. Med. Parasit. 62:1-3.
- 65. Gentle, T. A. and J. D. Gillett. 1968. Trials with sulphaquinoxaline as an insecticide against the aquatic stages of mosquitoes. Ann. Trop. Med. Parasit. 62:4-7.
- 66. Gillett, J. D. 1968. Natural selection and periodicity in blood parasites. Trans. R. Soc. Trop. Med. Hyg. 62:764-765.
- 67. Gillett, J. D. 1969. Yellow fever in East Africa today. E. African Med. J. 46:22-25.
- 68. Gillett, J. D. 1969. Biology breaks with tradition. The Times, 4 July.
- 69. Gillett, J. D. 1969. Aedes simpsoni in Chaggaland, Tanzania. Ann. Trop. Med. Parasit. 63:147-156.
- 70. Gillett, J. D. 1971. Man the third link in the epidemiological chain.
 Report of 1st Internat. Seminar SEATO, Bangkok.
- 71. Gillett, J. D. 1972. The behaviour of mosquitoes and the transmission of human disease. Pestic. Sci. 3:493-497.

- 72. Gillett, J. D. 1972. *Aedes simpsoni* in Chaggaland. II Breeding in banana axils. E. African Med. J. 49:285-290.
- 73. Gillett, J. D. and E. C. C. van Someren. 1972. *Aedes simpsoni* in Chaggaland. III Analysis of the feeding-cycle. E. African Med. J. 49:291-297.
- 74. Rao, T. R., M. Trpis, J. D. Gillett, C. Teesdale and R. J. Tonn. 1973.

 Breeding places and seasonal incidence of *Aedes aegypti*, as assessed by the single-larva survey method. Bull. Wld. Hlth. Org. 48:615-622.
- 75. Gillett, J. D. 1973. The mosquito: still man's worst enemy. Amer. Scientist 61:430-436.
- 76. Trpis, M., G. A. H. McClelland, J. D. Gillett, C. Teesdale and T. R. Rao. 1973. Diel periodicity in the landing of *Aedes aegypti* on man. Bull. Wld. Hlth. Org. 48:623-629.
- 77. Gillett, J. D. 1973. The control of arthropod-borne disease the next phase. In: Vector Control in S. E. Asia. Proc. SEAMEO, No. 1, Singapore, p. 31.
- 78. Gillett, J. D. 1974. Direct and indirect influences of temperature on the transmission of parasites from insects to man. In: The effects of meteorological factors upon parasites. Ed. A. E. R. Taylor and R. Muller, Blackwell Sci. Publ. 79-95.
- 79. Gillett, J. D. 1975. Mosquito-borne disease: a strategy for the future. Sci. Prog. Oxf. 62:395-414.
- 80. Gillett, J. D., S. J. Cole and D. Reeves. 1975. The influence of the brain hormone on retention of blood in the midgut of the mosquito Aedes aegypti (L). Proc. R. Soc. B. 190:359-367.
- 81. Gillett, J. D. 1975. Orchids the ultimate in adaptation? Brunel Bulletin Dec. 1975, 16-18.
- 82. Gillett, J. D. 1975. The *Anopheles gambiae* complex; naming the sibling species. Trans. R. Soc. Trop. Med. Hyg. 69:366-367.
- 83. Gillett, J. D. 1976. Apparatus for the routine production and collection of eggs of *Aedes aegypti*. Trans. R. Soc. Trop. Med. Hyg. 70:23.
- 84. Gillett, J. D., J. Connor. 1976. Host temperature and the transmission of arboviruses by mosquitoes. Mosquito News 36:472-477.
- 85. Gillett, J. D., E. A. Roman and V. Phillips. 1977. Erratic hatching in *Aedes* eggs: a new interpretation. Proc. R. Soc. B 196:223-232.

- 86. Gillett, J. D. 1978. Lunar periodicity of hay-fever in Entebbe, Uganda. Trans. R. Soc. Trop. Med. Hyg. 72:211.
- 87. Cole, S. J. and J. D. Gillett. 1978. The influence of the brain hormone on retention of blood in the mid-gut of the mosquito *Aedes aegypti* (L). II. Early elimination following removal of the medial neurosecretory cells of the brain. Proc. R. Soc. B 202:307-311.
- 88. Gillett, J. D. 1979. The vector concept. Antenna 3:17-22.
- 89. Gillett, J. D. 1979. The universities and health in the tropics: the problem and an answer. In: Pressures and Priorities. Proc. 12th Congr. Univ. of the Commonwealth, Vancouver, pp. 158-175.
- 90. Gillett, J. D. 1979. Vitamin C, yellow fever and plague; the near misses.

 Antenna 3:64-70.
- 91. Cole, S. J. and J. D. Gillett. 1979. The influence of the brain hormone on the retention of blood in the mid-gut of the mosquito Aedes aegypti (L). III. The involvement of the ovaries and ecdysone. Proc. R. Soc. B 205:411-422.
- 92. Gillett, J. D. 1979. Out for blood; flight orientation up-wind in the absence of visual cues. Mosquito News 39:221-229.
- 93. Gillett, J. D. 1981. Blood feeding and the neuroendocrine system in mosquitoes. Parasitology 82:97-98.
- 94. Gillett, J. D. 1981. Increased carbon dioxide and the spread of parasitic disease. In: Parasitological Topics. Ed. E. U. Canning. Society of Protozoologists Special Publication No. 1, pp. 106-111.
- 95. Gillett, J. D. 1982. Circulatory and ventilatory movements of the abdomen in mosquitoes. Proc. R. Soc. Lond. B 215:127-134.
- 96. Gillett, J. D. 1982. Diuresis in newly emerged, unfed mosquitoes.

 I. Fluid loss in normal females and males during the first 20 hours of adult life. Proc. R. Soc. B 216:201-207.
- 97. Gillett, J. D. 1982. Mid-gut air in newly emerged mosquitoes and its elimination. Proc. Calif. Mosq. Control Assoc. Sacramento 50:86-87.
- 98. Gillett, J. D. 1983. Diuresis in newly emerged, unfed mosquitoes. II. The basic pattern in relation to escape from the water, preparation for mature flight, mating and the first blood meal. Proc. R. Soc., B 217:237-242.
- 99. Gillett, J. D. 1983. Abdominal pulses in newly emerged mosquitoes, Aedes aegypti. Mosquito News 43:359-361.

- 100. Gillett, J. D. 1984. The effects of decapitation and the influence of size and sex on diuresis in newly emerged mosquitoes. Phys. Entom. 9:139-144.
- 101. Gillett, J. D. 1984. Insect swarming: individual or group selection, or both? Antenna 8:177-180.
- 102. Gillett, J. D. 1985. The behaviour of *Homo sapiens*, the forgotten factor in the transmission of tropical disease. Trans. R. Soc. Trop. Med. Hyg. 79 (in press).

Books

- Gillett, J. D. 1971. Mosquitoes. (World Naturalist Series) 274 pp. Weidenfeld and Nicolson, London.
- Gillett, J. D. 1972. Common African Mosquitoes and their Medical Importance. 106 pp. Heinemann Medical Books, London.
- *Gillett, J. D. 1972. The Mosquito its Life, Development and Impact on Human Affairs. 358 pp. Doubleday & Co. Inc. New York.
 - *A completely reset, slightly updated edition of "Mosquitoes" (1971).