Colour pages

Chapter 2.
Pim Martens and Chris Thomas; Figures 2 and 3

Figure 2. MARA/ARMA index of climatic suitability for *P. falciparum* transmission in four consecutive months

Figure 3. Number of consecutive months with a MARA/ARMA index of climatic suitability for *P. falciparum* transmission of $p \Sigma 0.9$ in each month
Figure 5. Inoculation efficiency as a determinant of incidence, for 17.5°S 25.0°E using ERA-40 weather. Simulated incidence patterns for 1995-2001 for varied values of $\alpha$.

Figure 7. Sensitivity of model to human parasite clearance. Simulated incidence, for 17.5°S 25.0°E using ERA-40 weather. Simulated incidence patterns for 1987-2001 for varied values of human clearance.
Figure 1. Map of the study area, Kisumu region, Kenya (indicated by the square)
Figure 3. Lay-out of LEMRA model (De Vries 2000)
Figure 4. Intra- and intercellular malaria risk
Figure 5. Modelling malaria risk in relation to environmental and land-use parameters
Figure 7. Land cover in Kisumu region

Figure 11. Illustration of land-use change (left: current; right: Flying Geese 2020)

Figure 14. Illustration of land use change (left: current; right: El Niño 2020)
Chapter 10.
Paulo de Tarso R. Vilarinhos; Figures 1, 2 and 4

Figure 1. Number of dengue cases reported per geographic region of Brazil, 1986-2003 (Source: SVS)

Figure 2. Dengue cases reported per month in Brazil, 1996-2003 (Source: SVS)
Chapter 11.
Willem Takken, Paulo de Tarso R. Vilarinhos, Petra Schneider and Fatima dos Santos; Figures 1 and 5

Figure 1. Map of Brazil and malaria-risk areas. Blue: low risk; green: medium risk; red: high risk (source: PNCM 2003)

Figure 4. Dengue serotypes circulating in Brazil, 2001-2003 (Source: SVS)
Figure 5. Satellite images of Rondônia, Brazil, showing the changes in land use following deforestation. The town on the right-hand side is Arequimes, the centre of the timber industry (source: Skole and Tucker 1993)
Figure 1. (a) Provinces or regions affected by bluetongue (BT) and African Horse Sickness (AHS) up to 1998. The key gives the virus, serotype and the years of the outbreak.
(b) Provinces or regions affected by bluetongue (BT) between 1998 and 2003. The key gives the serotypes of the outbreak.

In both (a) and (b) the blue line indicates the known distribution of *C. imicola* from light-trap catches made before 1998 and the red line indicates the current known distribution of *C. imicola* from light-trap catches made between 1998 and 2003. These lines are broken where they cross regions that have not been sampled for *Culicoides* in either period.
Figure 2. Suitability of sites in Europe for the occurrence of *C. imicola*, based on a logistic regression model established for Iberia (Reprinted from Wittmann, Mellor and Baylis 2001, with permission of the OIE)
Figure 3. (a) Abundances of *C. imicola* around the Mediterranean predicted by a model derived from the observed abundances at 44 sites in Iberia and Morocco. Key: red = high *C. imicola* abundance; yellow = medium *C. imicola* abundance; green = low *C. imicola* abundance; grey = no prediction (since the environment is too dissimilar from the training set pixels). (Reprinted from Baylis et al. (2001) with permission from Veterinary Record).

(b) Abundances of *Culicoides imicola* around the Mediterranean predicted by a model derived from the observed abundances at 87 sites in Portugal. Key: dark green = high *C. imicola* abundance; yellow = medium *C. imicola* abundance; light green/blue = low *C. imicola* abundance; grey = no prediction (since the environment is too dissimilar from the training set pixels). (Reprinted from Tatem et al. (2003) with permission from Elsevier)
Figure 4. Predicted distribution of Culicoides species in Sicily and Italy; a. *C. pulicaris* b. *C. obsoletus* c. *C. imicola*. For a and b, from a model derived from the observed presence–absence data for each species at 268 sites in Sicily, sampled between May and October. For c, from a model derived from the observed presence–absence data for *C. imicola* at 142 sites in Sicily, sampled between July and October. Key: green = model prediction of species presence; red = model prediction of species absence; grey = no prediction since Mahalanobis distance between a pixel and its assigned probability or class was two or more times greater than the maximum distance observed between any one of the sites in Sicily and the classes to which they belonged.