Investigating Spatial Associations: Malaria and Possible Vectors

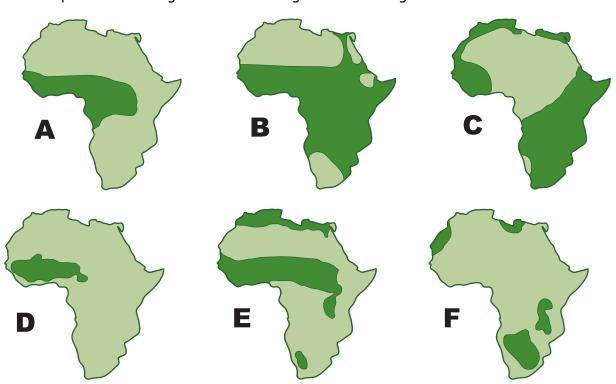
At first, no one knew how people caught malaria. The word "malaria" means "bad air," because some people thought that you got the diseaseby breathing the air in swamps, dense forests, and other wet places.

The process of discovering the real cause of malaria is a good example of geographic detective work. Part of that research was to compare maps that showed the range of different possible "vectors" (insects or other organisms that might carry the disease from one person to another).

Dark shading shows where malaria is common.



These maps show the ranges of six small organisms that might transmit malaria to humans.



Which three organisms shown on the maps above are the <u>least</u> likely to be responsible for transmitting malaria to humans? Circle their names:

- A. Chrysops (mango fly)
- B. Anopheles (mosquito)
- C. Ornithodoros (tick)

- D. Simulium (biting fly)
- E. Phlebotomus (sand flea) F. Xenophylla (rat flea)

Which one is the most likely? Why?