speciation must have been staggering, particularly among the insects, and it is hard to see how there could have been that many physical barriers, cut-off founder or relict populations and the like in this time. Therefore, it is both encouraging and fascinating for creationist biology to note that there is now an increasing acceptance that sympatric speciation is actually quite common. That means that a population may split into two species even while living in the same area, with no separation or physical barriers.

At the conference in question, evidence was presented of this sort of thing having happened with ease in populations of certain types of fruiteating insects which used the fruits of their host plant for courtship displays and mating. If one group of insects, used to eating a certain type of fruit, starts to try a new host plant, then food choice becomes linked with mate choice, and so reproductive isolation can begin. It is interesting that no-one put forward any evidence that any new genes arose by mutation — no new information seems to be required for any of these mechanisms. Fish living in the same lake can also, it seems, become reproductively isolated by way of genetically determined variation in

food choices, which leads to different sizes, and thus to differing mate choices.

In another instance, several species of wasps appear to have been thrust apart from a single ancestral wasp population by way of nothing more than differing species of bacteria in their gut. Somehow, the bacteria in the females destroy the DNA from males of the other species. Other mechanisms of speciation mentioned were as simple as variations in the song of a bird, or in a single pigment gene.

Hybridisation — the mixing of genes from two distinct species — has been observed to form a third, reproductively distinct grouping. Creationists would hold that the two species which hybridised were likely to have previously formed from a single ancestral population by way of nonevolutionary (that is, non-informationgaining) speciation. (The hybrid species is not necessarily an exact reversion to the ancestral form, of course, since this may have given rise to several other species since the original creation.) Once again, no information appears de novo which was not already in the biosphere; all that has happened is that two sets of existing information have commingled.



This clearly has no apologetic value for macroevolution, therefore, but is yet one more mechanism by which the creationist can account for the enormous increase in post-Flood variation.

REFERENCES

- 1. Gibbons, A., 1996. On the many origins of species. **Science**, 273:1496-1499.
- Morell, V, 1996. Starting species with third parties and sex wars. Science, 273:1499-1502.

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QUOTABLE QUOTE:Darwin versus Paley

The speculations of **The Origin** of Species turned out to be wrong ... It is ironic that the scientific facts throw Darwin out, but leave William Paley, a figure of fun to the scientific world for more than a century, still in the tournament with a chance of being the ultimate winner

Hoyle, Fred and Wickramasinghe, N. Chandra, 1981. **Evolution from Space: A Theory of Cosmic Creationism,** Simon and Schuster, New York, pp. 96-97.