Wave damping coefficient, D, is defined by

$$a_x = a_o e^{-Dx}$$

Wave damping is a measure of energy dissipation within the bed.

Uncertainty in measurement of viscoelastic constants μ and G is partly responsible for data scatter.

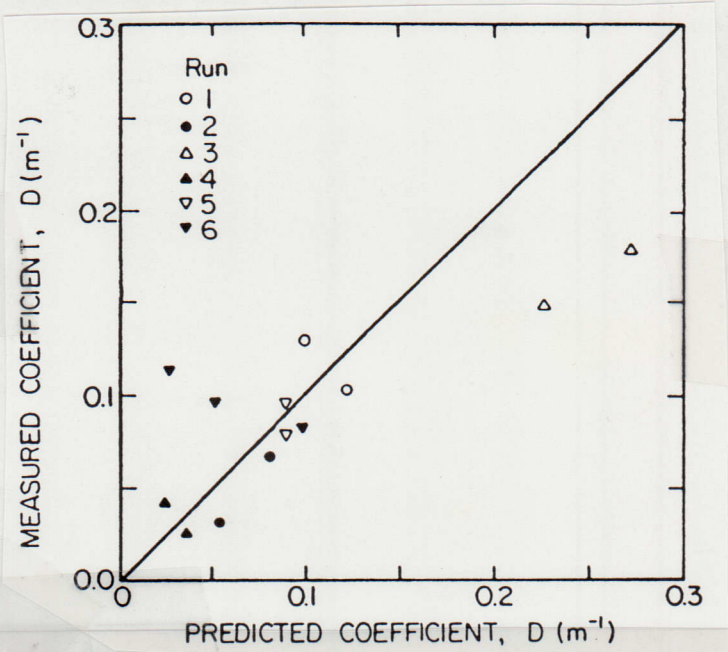

Fig. 14. Comparison between measured and predicted values of D.
Source: Maa (1986)

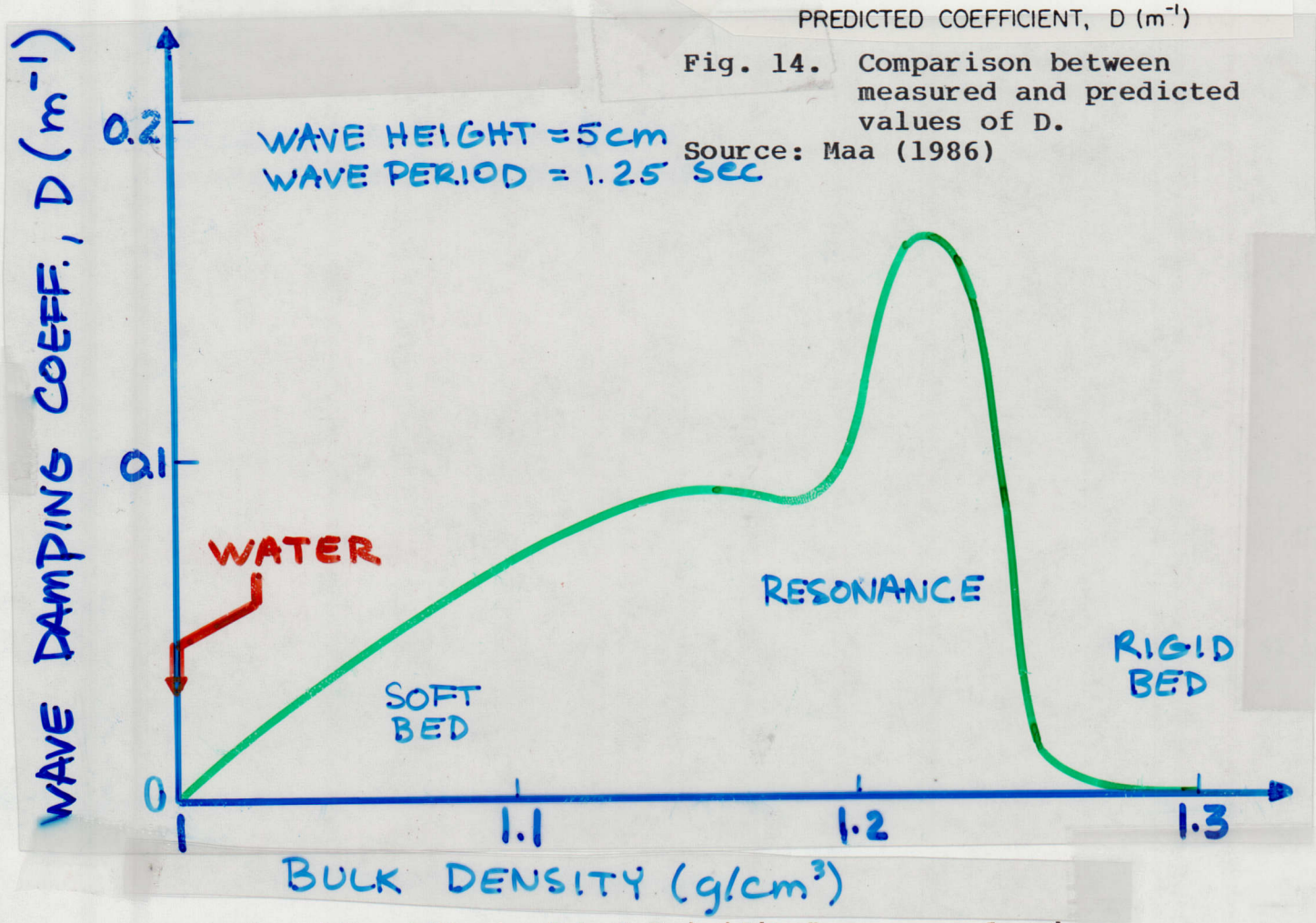

Fig. 15. Effect of bed "rigidity" on wave damping.

- Resonance condition corresponds to greatest transmission of wave energy into the mud bed. Simulation is based on "typical values" of μ, G and other parameters related to flume tests.