

## Results from the OptIC project:

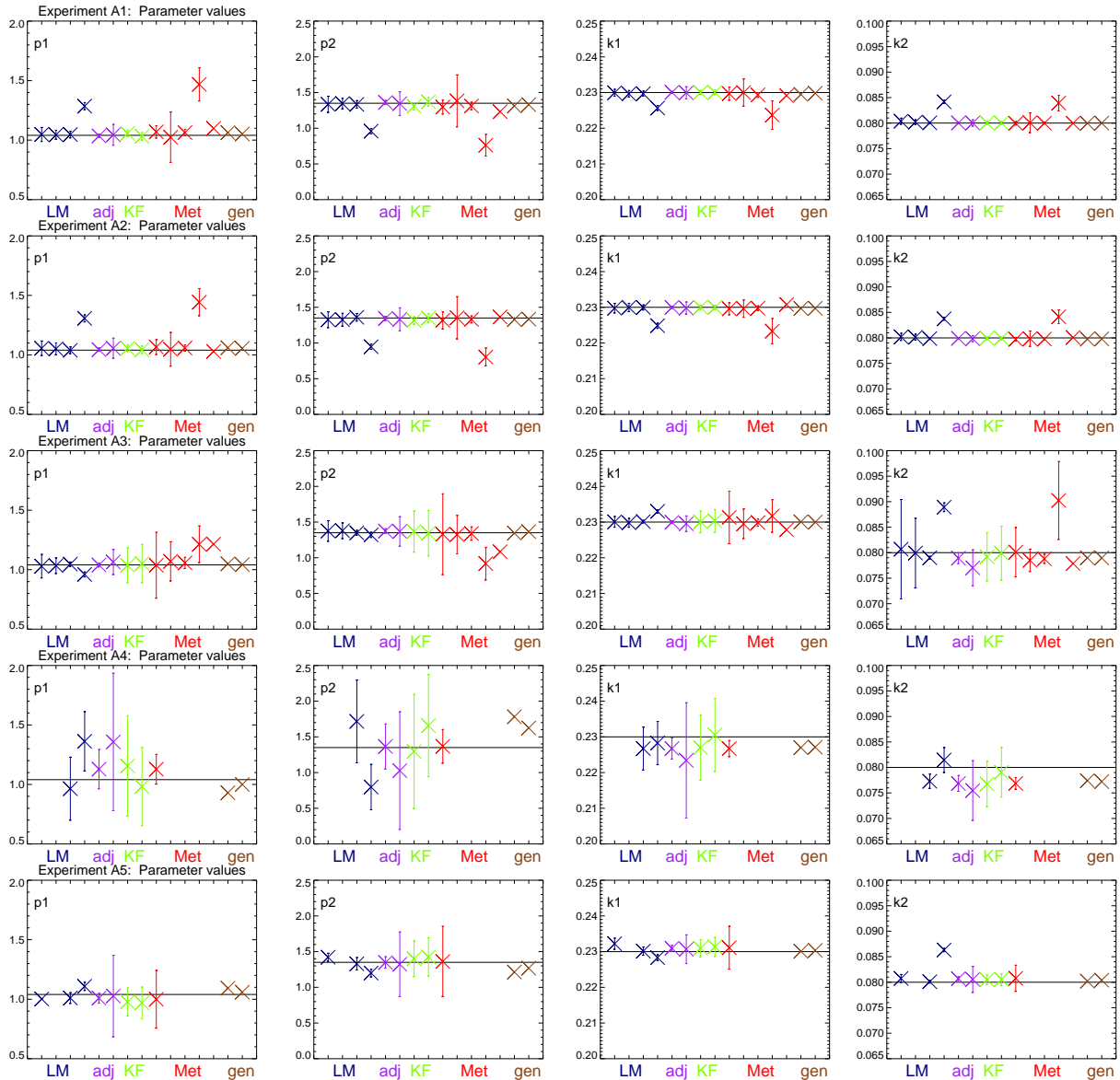


Figure 1: Parameter estimates for Experiments A1-A5 with participants' choice of cost function. These results correspond to Figure 4 of Trudinger et al. (2007). Error bars indicate the  $1\sigma$  uncertainty (square root of the diagonal element of the estimated covariance matrix). True parameters are shown by the horizontal lines. Methods are ordered as LM1, LM1r, LM2, LM3, Adj1, Adj2, EKF, EnKF, Met1, Met1r, Met2, Met2z, Met3, Gen1, Gen1a. Not all participants submitted results for all experiments. Covariance matrices were not submitted for methods Gen1 and Gen1a.

Trudinger, C.M., M.R. Raupach, P.J. Rayner, J. Kattge, Q. Liu, B. Pak, M. Reichstein, L. Renzullo, A.D. Richardson, S.H. Roxburgh, J. Styles, Y.P. Wang, P. Briggs, D. Barrett and S. Nikolova (2007), OptIC project: An intercomparison of optimization techniques for parameter estimation in terrestrial biogeochemical models, *J. Geophys. Res.*, **112**, doi:10.1029/2006JG000367.

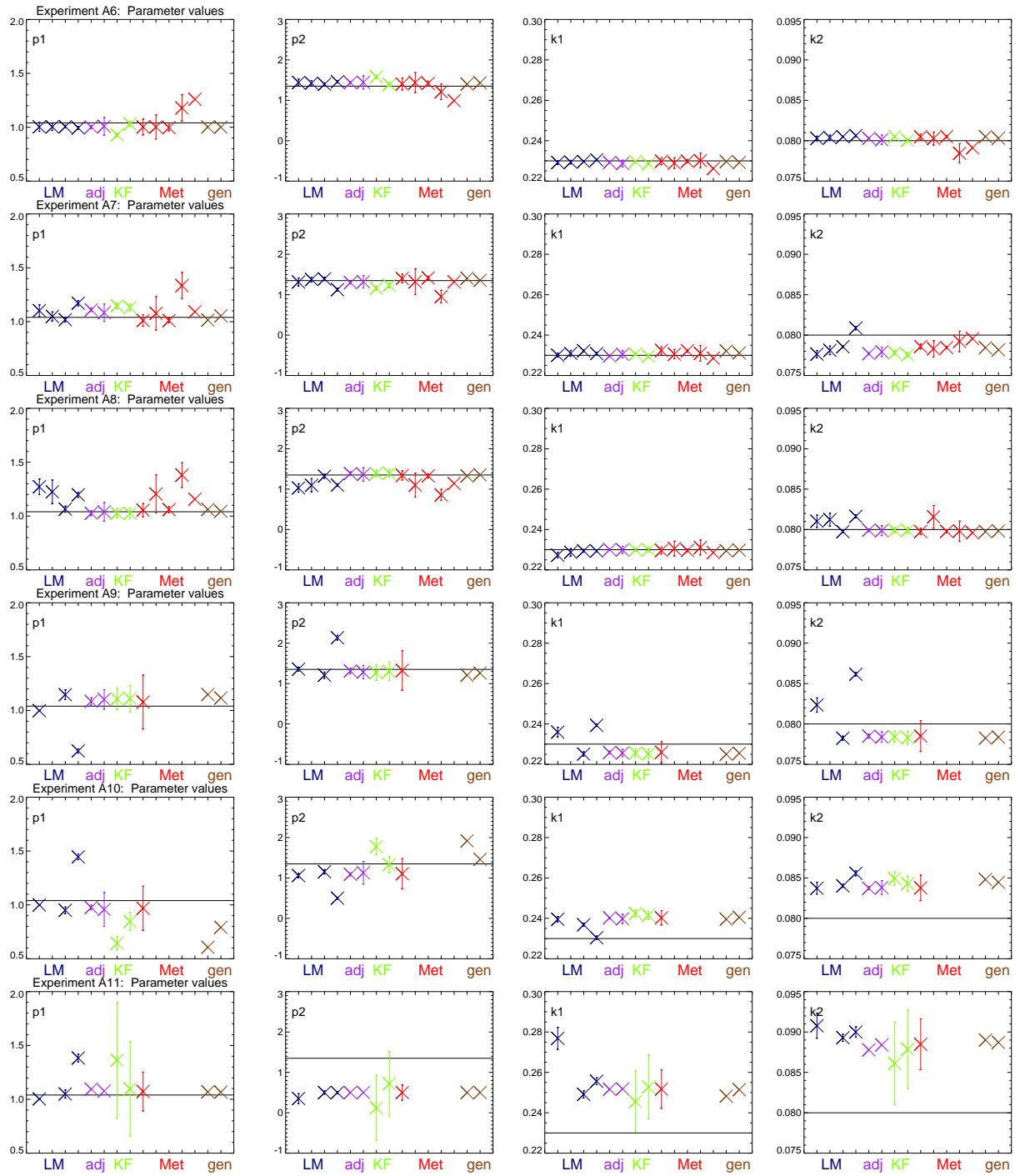


Figure 2: Parameter estimates for Experiments A6-A11 with participants' choice of cost function.

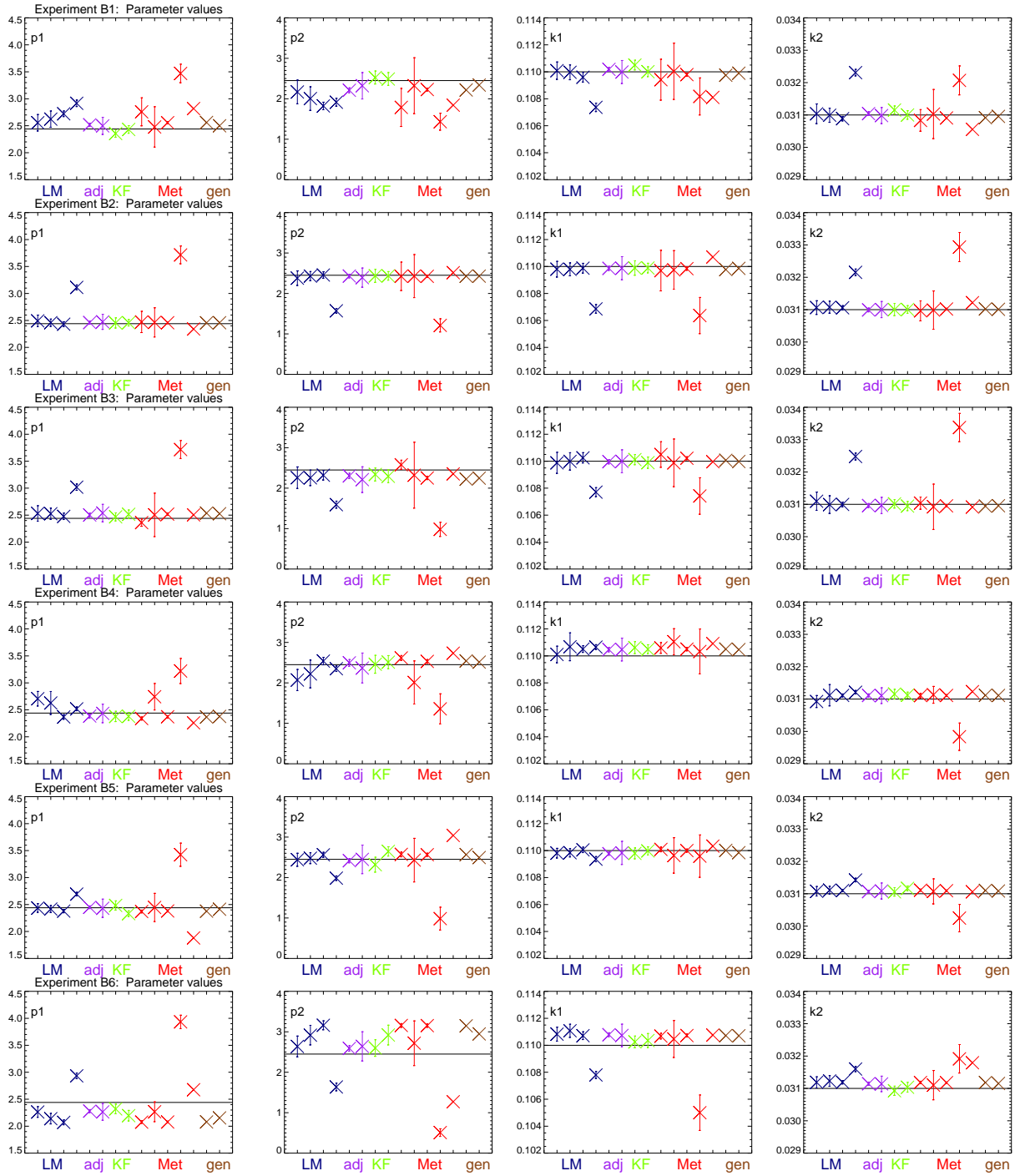


Figure 3: Parameter estimates for Experiments B1-B6 with participants' choice of cost function.

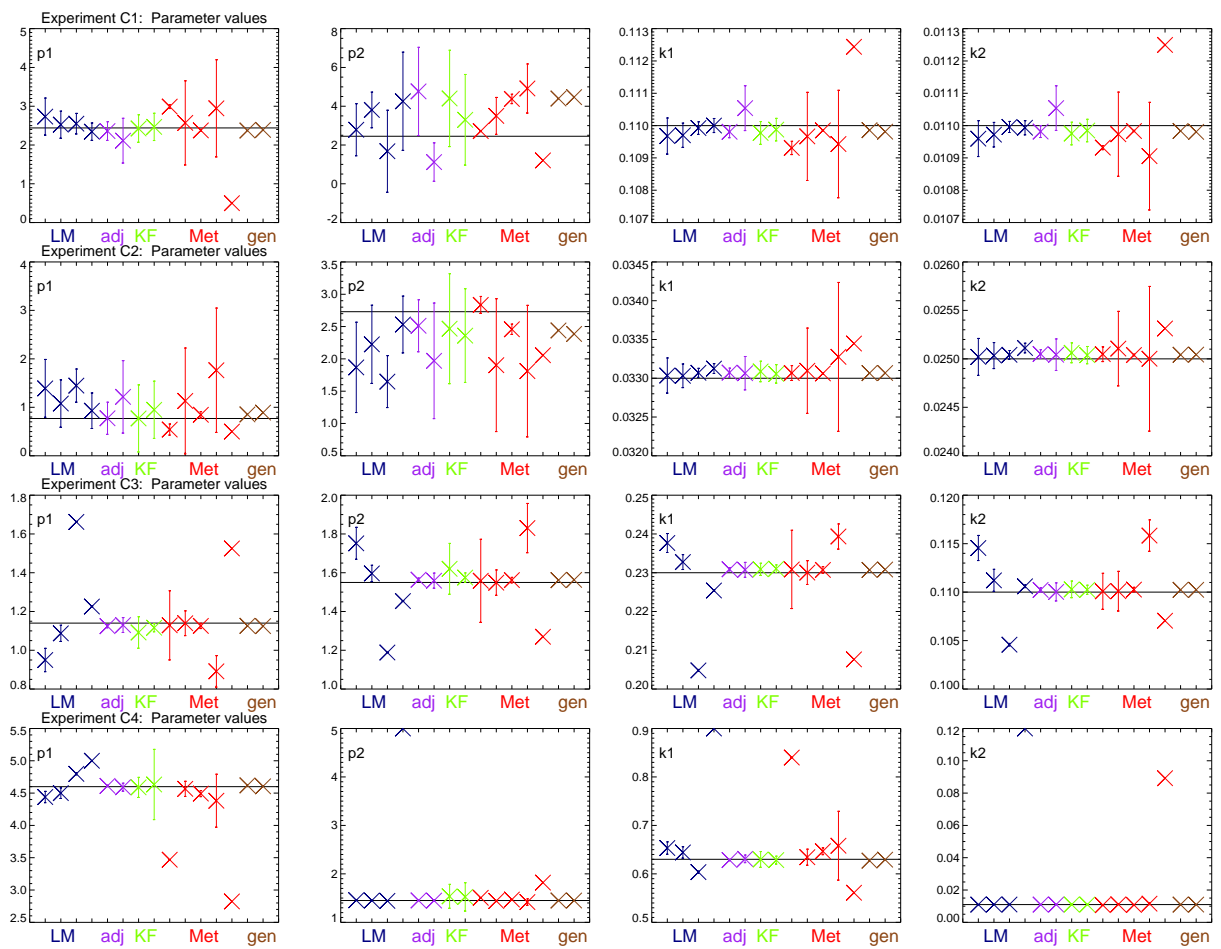


Figure 4: Parameter estimates for Experiments C1-C4 with participants' choice of cost function.