

Fig. 1. Variance-mean current relation analysis for ClC-2 channels. A. Mean current obtained from 95 current traces elicited by repeating the pulse shown in B at 20 s intervals. C. Variance for the tail currents obtained during the 30 mV part of the current response. D. Plot of the variance versus the magnitude of the mean current. A parabola of the form  $\sigma^2 = I < I^2 > /N$  has been fit to the points; i is the unitary current,  $< I^2$  is the macroscopic mean current and N is the number of channels present. The fitted value of i was 0.18 pA, N=8,341. The fit implies that the channel are open at a  $P_o=0.85$  at the peak of the current.