

TABLE 2

| 1<br>Cell no.<br>(see Table 1) | 2<br>Permeability coefficient<br>(from eqns (73), (74), (76))<br>cm/sec | 3<br>Permeability coefficient<br>(from eqns (67) & (68))<br>cm/sec | 4<br>Ratio |
|--------------------------------|-------------------------------------------------------------------------|--------------------------------------------------------------------|------------|
| 1                              | $1.09 \times 10^{-4}$                                                   | $3.15 \times 10^{-5}$                                              | 0.35       |
| 2                              | $1.03 \times 10^{-3}$                                                   | $1.97 \times 10^{-4}$                                              | 0.19       |
| 3                              | $4.49 \times 10^{-4}$                                                   | $7.30 \times 10^{-5}$                                              | 0.16       |
| 4                              | $9.55 \times 10^{-4}$                                                   | $1.65 \times 10^{-4}$                                              | 0.17       |
| 5                              | $1.36 \times 10^{-4}$                                                   | $7.02 \times 10^{-5}$                                              | 0.05       |
| 6                              | $9.15 \times 10^{-4}$                                                   | $1.11 \times 10^{-4}$                                              | 0.12       |
| 7                              | $1.62 \times 10^{-3}$                                                   | $2.69 \times 10^{-4}$                                              | 0.17       |
| 8                              | $6.40 \times 10^{-4}$                                                   | $2.16 \times 10^{-4}$                                              | 0.34       |
| 9                              | $8.27 \times 10^{-4}$                                                   | $3.12 \times 10^{-4}$                                              | 0.38       |
| 10                             | $1.15 \times 10^{-3}$                                                   | $4.60 \times 10^{-4}$                                              | 0.40       |
| 11                             | $1.40 \times 10^{-3}$                                                   | $1.09 \times 10^{-4}$                                              | 0.08       |
| 12                             | $2.14 \times 10^{-3}$                                                   | $1.65 \times 10^{-4}$                                              | 0.08       |
| 13                             | $5.79 \times 10^{-4}$                                                   | $1.36 \times 10^{-4}$                                              | 0.24       |
| 14                             | $9.25 \times 10^{-4}$                                                   | $3.32 \times 10^{-4}$                                              | 0.36       |
| 15                             | $8.05 \times 10^{-4}$                                                   | $2.98 \times 10^{-4}$                                              | 0.37       |
| 16                             | $2.19 \times 10^{-2}$                                                   | $1.78 \times 10^{-3}$                                              | 0.08       |
| 17                             | $8.95 \times 10^{-4}$                                                   | $4.96 \times 10^{-4}$                                              | 0.55       |
| 18                             | $1.43 \times 10^{-2}$                                                   | $4.63 \times 10^{-3}$                                              | 0.32       |
| 19                             | $1.42 \times 10^{-2}$                                                   | $5.90 \times 10^{-3}$                                              | 0.42       |
| Geometrical mean = 0.21        |                                                                         |                                                                    |            |

The permeability coefficient in column 2 is that calculated in section 7 from the flux of water across the cell membrane assuming that the interior of the cell is always uniform in composition, i.e. that internal diffusion is infinitely rapid. The permeability coefficient in column 3 is that derived by approximate calculation in sections 3, 4 and 5 allowing for finite internal diffusion but substituting the value  $D = \infty$  in the equation. Values in column 3 are generally lower than those in column 2 owing to the approximations used. Column 4 gives the ratio of values in column 3 to those in column 2.