

# Contents

Volume 199 (7) 1996

## Review

### Moriyama, Y.

- Membrane energization by proton pumps is important for compartmentalization of drugs and toxins: a new type of active transport 1447–1454

### Carrier, D. R.

- Function of the intercostal muscles in trotting dogs: ventilation or locomotion? 1455–1465

### Labhart, T.

- How polarization-sensitive interneurones of crickets perform at low degrees of polarization 1467–1475

### Cruse, H. and Silva Saavedra, M. G.

- Curve walking in crayfish 1477–1482

### Joanisse, D. R. and Storey, K. B.

- Oxidative stress and antioxidants in overwintering larvae of cold-hardy goldenrod gall insects 1483–1491

### Glass, M. L., Branco, L. G. S., Antunes-Rodrigues, J. and Gutkowska, J.

- Characterization of the atrial natriuretic factor system in lungs of the toad *Bufo paracnemis* 1493–1499

### Ker, R. F.

- The time-dependent mechanical properties of the human heel pad in the context of locomotion 1501–1508

### Vijayan, M. M., Mommsen, T. P., Glémet, H. C. and Moon, T. W.

- Metabolic effects of cortisol treatment in a marine teleost, the sea raven 1509–1514

### Schwarzbaum, P. J., Bernabeu, R. O., Krumschnabel, G., Biasi, C. and Wieser, W.

- Effect of chemical anoxia on protein kinase C and  $\text{Na}^+/\text{K}^+$ -ATPase in hepatocytes of goldfish (*Carassius auratus*) and rainbow trout (*Oncorhynchus mykiss*) 1515–1521

### Glendinning, J. I.

- Is chemosensory input essential for the rapid rejection of toxic foods? 1523–1534

### Fonseca, P. J. and Hennig, R. M.

- Phasic action of the tensor muscle modulates the calling song in cicadas 1535–1544

### Riestenpatt, S., Onken, H. and Siebers, D.

- Active absorption of  $\text{Na}^+$  and  $\text{Cl}^-$  across the gill epithelium of the shore crab *Carcinus maenas*: voltage-clamp and ion-flux studies 1545–1554

### Mészáros, M. and Morton, D. B.

- Comparison of the expression patterns of five developmentally regulated genes in *Manduca sexta* and their regulation by 20-hydroxyecdysone *in vitro* 1555–1561

### Signore, P. E. and Jones, D. R.

- Autonomic nervous control of heart rate in muskrats during exercise in air and under water 1563–1568

### Zeil, J. and Al-Mutairi, M. M.

- The variation of resolution and of ommatidial dimensions in the compound eyes of the fiddler crab *Uca lactea annulipes* (Ocypodidae, Brachyura, Decapoda) 1569–1577

### Webster, S. G.

- Measurement of crustacean hyperglycaemic hormone levels in the edible crab *Cancer pagurus* during emersion stress 1579–1585

### Williams, E. E. and Somero, G. N.

- Seasonal-, tidal-cycle- and microhabitat-related variation in membrane order of phospholipid vesicles from gills of the intertidal mussel *Mytilus californianus* 1587–1596

### Isaacson, L. C. and Nicolson, S. W.

- Electrical transients in the cell-volume response to cyclic AMP of the tsetse fly Malpighian tubule 1597–1604

### de Boeck, G., Nilsson, G. E., Vlaeminck, A. and Blust, R.

- Central monoaminergic responses to salinity and temperature rises in common carp 1605–1611

### Pennycuick, C. J.

- Wingbeat frequency of birds in steady cruising flight: new data and improved predictions 1613–1618

### Neufeld, D. S. and Wright, S. H.

- Salinity change and cell volume: the response of tissues from the estuarine mussel *Geukensia demissa* 1619–1630

### Meyer, J. and Elsner, N.

- How well are frequency sensitivities of grasshopper ears tuned to species-specific song spectra? 1631–1642