Mammalian embryogenesis

Concepts in Mammalian Embryogenesis. Edited by Michael I. Sherman. Pp. 404. (MIT Press: Cambridge, Massachusetts and London, 1977.) £17.50; \$30.

"IT is a tribute to the research enterprise currently directed towards the molecular biology of the early mammalian embryo that new chapters are being added to the unfolding story almost every year." So Van Blerkom and Manes begin their chapter. Every chapter could begin with a similar sentence. They go on: "We are aware of the numerous reviews . . .". So am I, and I was feeling fairly bored when I began reading. The boredom did not last long. This collection of papers is the most readable account of most of the very various lines of research currently forming the mammalian development bandwagon.

Sherman points out, somewhat apologetically, that the book is mostly about mice. There is no need to apologise; much comparative biology is included. The book covers classical embryology, genetics, molecular biology, cell surfaces (Jenkinson and Billington), tumour viruses (Jaenisch and Berns) and terato-

Medicinal plants

Major Medicinal Plants: Botany, Culture and Uses. By Julia F. Morton. Pp. 431. (Charles C. Thomas: Springfield, Illinois, 1977.) \$49.50.

BOOKS on medicinal plants vary from folksy and occasionally somewhat batty popular ones to textbooks of pharmacognosy, and it may be difficult to realise that they are about some of the same plants. Dr Morton's book is not folksy and certainly has no affinity to the lunatic fringe, but neither is it a textbook; indeed, she states this specifically. It is, however, a valuable adjunct to textbooks of pharmacognosy and should be seen in that light.

About a hundred plants are arranged systematically with sections giving descriptions, origins and distribution, medicinal and other uses, constituents, propagation, and so on. A great deal of work has gone into accumulating the information, and most of it is both pertinent and interesting. However, one is brought up short on occasion by statements such as the one that Marsh Mallow (Althaea officinalis) is grown in gardens in Great Britain. No, I am afraid it is not. Possibly the reason for this error is too great a reliance on common names; according to Mrs Grieve in A Modern Herbal country people used to call the Common Mallow, Marsh Mallow. Again, the distribution of Frangula alnus (syn. Rhamnus carcinomas (Graham). The chapters on embryology (Rossant and Papaioannou), and genetics of the early embryo (Chapman, West and Adler) add little if anything to the other recent reviews, principally because they involve the most time-consuming experimental analysis, but Rossant and Papaioannou include an uncommon but valuable historical perspective on the embryology.

There are positively heroic efforts to analyse two problems which make the Gordian knot look like a job for the Boy Scouts. Sherman and Wudl tackle the T-locus mutations and gather together, in 99 pages, a quite bewildering compendium of data which, although a bit repititious, is an invaluable service in itself. They have brought conflicting data on this complex chromosomal site face to face in one paper-much of it, I think, for the first time. To follow all their arguments seems to me a job for six months' solitary confinement but at least it is a stimulating challenge to current dogma.

The second major contribution is Graham's review of teratocarcinomas. Though shorter (but only just), this chapter discusses the several origins of teratocarcinomas and attempts to resolve some of the interesting differences between the tumours produced, and the

frangula) is given as South-Eastern Europe and Russia. In fact, the Alder Buckthorn is native to Britain and on the Continent from Sweden to the Urals and Siberia, as well as Morocco and Algeria! But these are minor quibbles, amongst a mass of useful information.

It is interesting to note how few plants are used medicinally in orthodox American medicine nowadays. This point is emphasised by the long tables at the end of the book, one of which is on plants no long officinal in the United States, but still mentioned in textbooks and still used in other countries. The other table is on plants used as pharmaceutical aids and adjuncts, varying from algae used in the production of agar to flavourings. There is also a copious bibliography.

The illustrations to this book let it down badly. Many are taken from Bentley and Trimen's Medicinal Plants (1880), and Blair's charming drawings have suffered a most unfortunate sea change in the course of reproduction. The modern drawings are coarse in texture, but this again may be due to the method of reproduction. The black-andwhite photographs are practically all bad and often out of focus. The colour photographs too are not good, and there was surely no need to have the entire photograph of the Great Scarlet Poppy (Papaver bracteatum) bright red in colour? **Rosemary Angel**

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differences between them and embryos.

All chapters are very well referenced and the editors have had the foresight to insist on a common terminology throughout, providing a glossary at the start of the book. A good idea, but it is unfortunate that they have elected to perpetuate a few confusing inexactitudes —for example, visceral endoderm for proximal endoderm, embryonic or primitive ectoderm for epiblast (this latter confusion by failing to provide guidance of any sort).

There are two curious omissions; parthenogenesis, which receives three paragraphs *in toto*; and embryos *in vitro* which, although very much in evidence throughout, do not receive specific mention to any extent. In the index one author apparently accords them ten pages but inspection reveals that seven of these are taken up by illustrations of other things.

But these criticisms are trivial, as the monograph is justified by the T locus and teratocarcinoma reviews alone; the remainder is high quality icing on the cake.

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