

## BOOK REVIEW

*TEEANALYSE*, by L. Hörhammer. 75 pages + 60 full page plates comprising 556 photographs. Institut für Pharmazeutische Arzneimittellehre der Universität, Munich, 1955. DM.58.00.

The identification of vegetable drugs in the chopped condition calls for a detailed and applied pharmacognostical knowledge. The Atlas under review describes and figures those morphological characters used to identify 275 crude drugs which have been found in herbal teas occurring in current German pharmaceutical practice. All are normal drugs prepared in tea form by chopping and admixture. The following are described: 30 leaves, 77 herbs, 34 flowers, 24 fruits, 8 seeds, 7 woods, 25 barks, 36 roots, 12 rhizomes and 22 miscellaneous drugs. Each drug is photographed in the chopped condition to show its diagnostic characters at a magnification  $\times 2$ ; for comparison a photograph of the entire drug  $\times 1$  is given and in this way the significance of the diagnostic characters is emphasised. Adulterants are shown in some of the photographs. The 60 full page plates comprising 556 photographs are unbound and contained in a folder. The text to the Atlas is a book of 75 pages containing for each drug the Latin and common German name, biological sources, a concise description of the chopped sample, together with chemical tests and common adulterants where applicable, also brief references to diagnostic microscopical characters; drug constituents, actions and uses are recorded and finally detailed legends to the Atlas photographs are given. Arrangement of drugs is in morphological groups; the text contains a brief introduction to each group showing the classification employed within that group, e.g., colour, surface characters, shape. The author claims that chopped drugs which are superficially alike and may be confused are in this way considered side by side and so by picture and by description they are more certainly differentiated.

The photographs comprising the plates are of excellent quality with good definition showing every detail. As many as 20 to 30 pieces of one chopped drug are photographed and these have been well selected to illustrate the complete range of diagnostic characters; they alone form a most valuable record of the morphology of these crude drugs. The author is probably wise in maintaining the one fixed magnification of  $\times 2$  for all photographs of chopped drugs, but with such excellent photography certain of the smaller specimens, e.g., coriander, cardamom seed, mustard seed, would have displayed their diagnostic characters to still better advantage at a higher magnification. The majority of the drugs considered could be identified by means of the excellent photographs alone, but the text is also valuable in describing the drug characters and in outlining the methods of subdivision within the groups. These subdivisions are not always those normally applied to the entire drugs; thus flowers are classified according to their colour and in consequence such natural groups as the Composites and the Labiates are scattered throughout the three plates of photographs. In consequence the author might with advantage have incorporated definite analytical keys, especially for the larger groups of drugs. Such criticisms are, however, minor ones and apart from its high price and the necessity to read German the Atlas can be fully recommended as an excellent compilation and photographic record of this group of drugs.

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