Realising the need of a well developed, internationally applied terminology of the bark anatomy, equivalent to that of wood anatomy; a few extensive surveys and discussions of bark anatomical terminology have been attempted (Martin and Crist, 1970; Paramesaran, 1980; Trockenbrodt (1990) is mainly based on bark anatomy. Junikka (1994) has pointed out the importance of external morphology of bark, especially in the identification of trees under vegetative condition. He has listed different macroscopical terms in addition to anatomical terms of the bark.

In this present work, most of the terms of the bark morphology and anatomy as defined by Trockenbrodt (1990) and Junikka (1994) are used. The terms, viz. “fibres, selerids” and “pseudocrotex” have not been recommended by those authors. Elements like fibres, scelerids
and their intermediate forms are designated by a common term “sclerenchymatic elements”. Esau (1979) defined ‘fibre–sclerids” as cells, having the shape, length and wall thickness of fibres, but originate so do the sclerids by sclerosis of parenchyma cells. As in sclerids pits may be conspicuous, show intensive growth intrusive growth and have lamellae walls. On the developmental context Fahn (1974) explains the term fibre-sclerid as ‘Phloem-fibres’ that develop from parenchyma cells of non-functional phloem. Parameswaran (1980) in his attempt to offer some suggestions towards a redefinition of various lignified cells, Namely fibre-sclerid (sensu Esau) “Sclerotic phloem fibres”.

In this present work ontogenetic studies of the phloem components have not been attempted. However, when it noticed the type of sclerenchymatic elements with all qualifying morphology characteristics of “fibre-sclerids” as suggested by Esau (1971), the same term for such elements have been used in order to differentiate them from ‘true-fibres’.

The term ‘pseudocortex’ was proposed Whitemore (1962) in dealing with the bark morphology of Dipteroearpaeae. Of three patterns of expansion of phloem rays, the third category is designated as ‘pseudocortex’. It is a cortex like outer zone of living tissue merging with the secondary phloem in just as way the primary cortex does. In some of the taxa studied in the present work, It is come across such parenchymatous, cortex-like zone formed by dilated rays and the term ‘pseudocortex’ for such tissue have been used.

In some of the taxa handled in the present study the branch bark and trunk bark have persistent superficial phellogen producing periderm of varying thickness. Beneath the periderm is a broad parenchymatous zone bounded internally by a continuous cylinder of sclerenchymatic elements. The parenchymatous zone is one which is originally present in the cortex of young stem. This part of stem persists and grows in circumference both by hypertrophy and hyperplasia and retains its original position in mature branches and trunks. The term “persistent cortex” is used in the present study to designate the parenchymatous zone found in between the periderm and sclerenchymatous inner boundary, which has obviously no ontogenetic relationship with the dilated rays or periderm.
The inner bark or the secondary phloem is differentiated into non-collapsed and collapsed secondary phloem. Instead of naming them functioning/conducting phloem and non-functional/non-conducting phloem respectively, they are named as non-collapsed and collapsed phloem on valid reasons (Junikka, 1994; Lev-Yadun, 1991). Sometimes in a bark with very wide secondary phloem, one can differentiate microscopically an inner zone of intact phloem elements followed in centrifugal sequence by a transitional zone of partially crushed cells and then totally crushed and obliterated cells. These three zones also differ in cell inclusions and staining properties. In such instances the terms ‘inner, middle and outer zones’ of secondary phloem are used by retaining, the original concepts of ‘outer bark’ and ‘inner bark’.

Trackenbrodt (1990) restricts the term ‘dilation meristem’ to ‘radially oriented meristematic cell layers in phloem rays of some plants. Lev-Yadun (1991) had extended the concept of this terminology to include, in addition to ray dilation, any “similar meristematic zone in various other orientations and from other origins within the bark”. There are some instances where not only the phloem rays but also the axial parenchyma assume the properties of ‘dilation meristem’. Under such situations, Lev-Yadun’s (1991) definition of “dilation meristem” in broader sense seems to be preferable.