

6 Fig. 6.1 is a scanning electronmicrograph of xylem vessels.

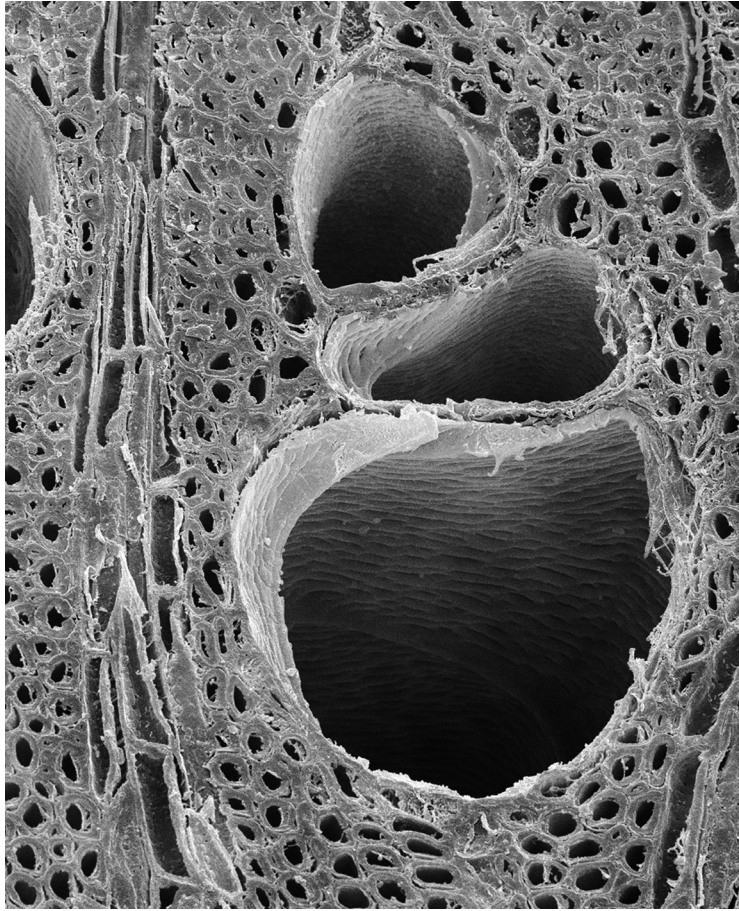


Fig. 6.1

(a) Describe how xylem vessels, such as those shown in Fig. 6.1, are adapted to their functions.

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Fig. 6.2 shows the masses of water transpired and the masses of water absorbed by loblolly pine, *Pinus taeda*, and prickly pear cactus, *Opuntia ficus-indica*, over a 24 hour period.

For
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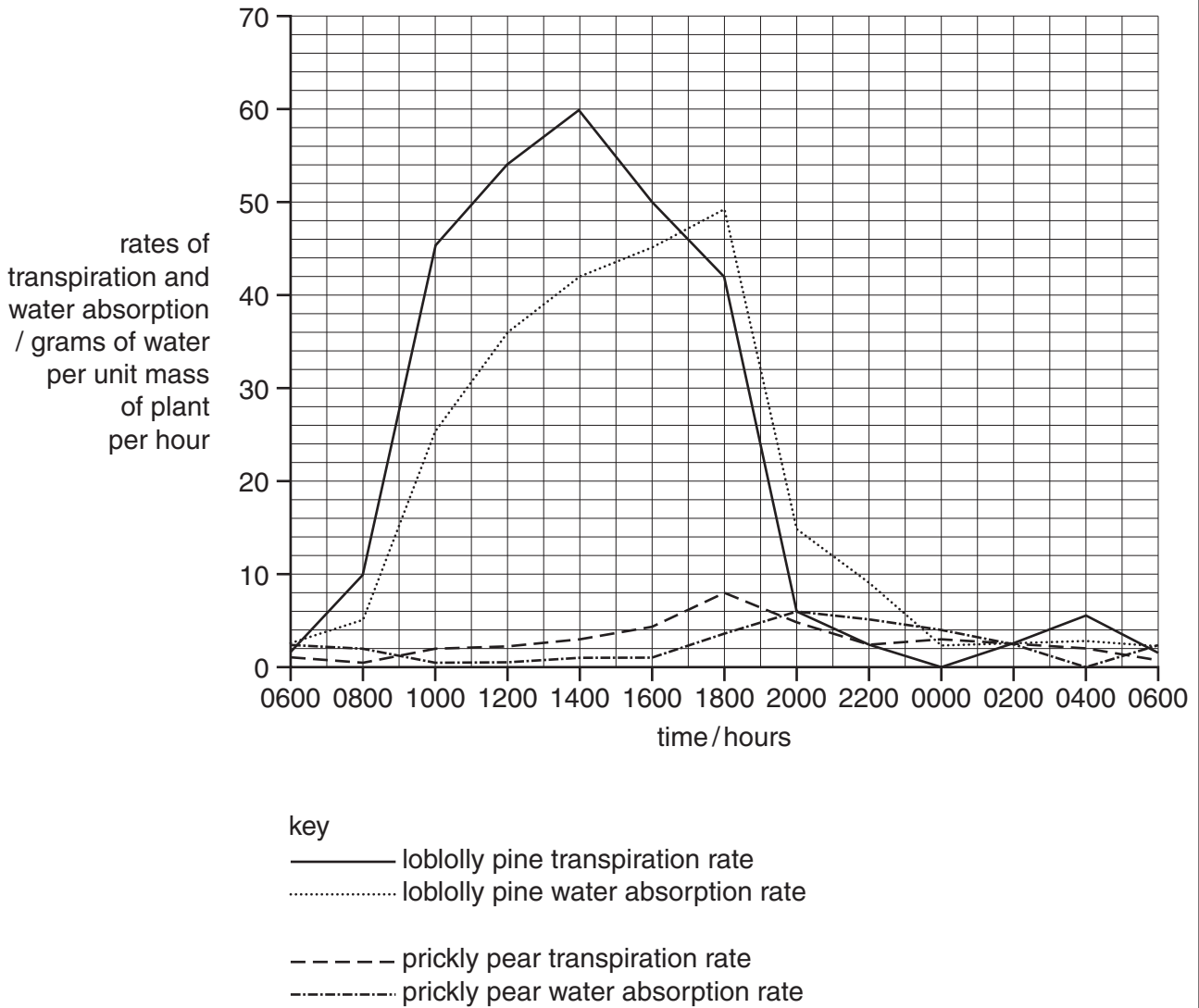


Fig. 6.2

(b) (i) Describe **and** explain the patterns of transpiration and water absorption in loblolly pine.

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(ii) Suggest why the patterns of transpiration and water absorption for prickly pear are **not** the same as for loblolly pine.

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