

Translate the following text into Arabic: ترجم إلى العربية:

Water Movement

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The movement of water from the roots to the leaves is a critical function in a plant's life. The flow of water depends upon air pressure, humidity, adhesion, and cohesion. At sea level, normal air pressure can force water up the columns of xylem from the roots to a height of many feet. These columns of water continue to flow upward because water molecules stick to the walls of xylem by adhesion and stick to one another by cohesion. Water initially moves into the root hair cells by osmosis, because the mineral content of the cells is higher than that of the surrounding environment. Thus, a root pressure is established and extends into the microscopic tubes of the xylem.

ان حركة المياه من جذور النباتات وصولا لأوراقها لاشك تلعب دورا هاما في حياة النبات . فتدفع المياه يعتمد علي عوامل عدة منها ضغط الهواء والرطوبة وكذا خاصيتي التماسك والتلاصق ففي مستوي البحر يستطيع ضغط الهواء الطبيعي ان يدفع الماء لعدة اقدام الي اعلي النيات ويعزي استمرار تدفق اعمدة الماء هذه الي اعلي في النباتات الي التصاق جزيئات الماء بجدرانها وكذا تماسكها ببعضها البعض. وبفعل الضغط الاسموزي ينتقل الماء الي خلايا الشعيرات الجزئية وذلك لاختلاف المستوي الملحي عن البيئة المحيطة وهكذا يتولد ضغطا جذريا ويمتد الي اعالي اجزاء النبات.

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Summarize the following text in 4 lines using your own words

لخص النص التالي في خمسة اسطر بأسلوبك

The ultimate goal for any agronomist is to increase the productivity and improve the quality of any field crop. This is very important issue to solve the problem of food for human consumption and feed for animal nutrition. This objective can be achieved through two factors:

1- Horizontal increase in agriculture: which means enlarging the area of land under cultivation by different ways of reclamation.

2- Vertical increase in agriculture: which means the increase of the average yield of the area under cultivation by means of improving the agricultural practices used, i.e. the use of fertilizers, improved crop varieties applying suitable crop rotation, developing new varieties which characterized by high yield potentiality and resistance to diseases and insects.

Answer

Summary

Increasing productivity and improving quality of crops are the agronomist's goals. This can be achieved through two methods. Horizontal increase which means enlarging the area of land under cultivation. The other method is Vertical increase which means the increase of the average yield of the area under cultivation