

What are Those White Spots on Alfalfa Roots?

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Digging up alfalfa plants and examining the roots and crowns is a good practice to employ in spring once plants have started to break dormancy. Inspecting the underground portions of plants will give you a good prediction of how well the plants will perform above ground in forage production.

Alfalfa roots often have small white structures that can appear alarming. These structures, called lenticels, are normal structures of healthy roots that are involved in gas exchange. They may be more numerous on roots from heavy soils that retain moisture.

Healthy roots will feel firm and typically have multiple lateral roots and fine fibrous roots with pink nodules, indicating active nitrogen fixation. The central core of the root, the cortex, should be white with a limited amount of discoloration or rot.

Healthy plants that have not suffered damage from disease or winter stresses will have a symmetrical crown with buds arising from around the crown and will be highly productive. Plants that have lost more than half of the crown or have formed a secondary crown will be less productive and may die off during the next season.

