SEASONAL NOTES . . .

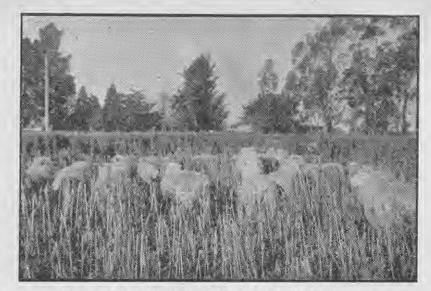
satisfactory because of the slow germination and rate of establishment of the paspalum seed. Many farmers have had fairly good results from feeding out paspalum hay, but obtaining a good-quality hay containing a reasonable quantity of viable seed is the difficulty.

L UPINS are a valuable fodder crop, especially on light and medium soils where prospects of obtaining a good turnip crop are uncertain. They are a safe crop under average farm management and provide a fair amount of feed of high nutritive value. They can be fed to stock at any stage of growth, but usually are left until near flowering. At this stage they provide the maximum of leafage with a minimum of coarse stem. Until then they are resistant to heavy frosts, but once the buds begin to show colour this frost the buds begin to show colour this frost than they may have withstood already. Though lupins sometimes suffer from

Though lupins sometimes suffer from attacks of "sore shin" and sclerotinia disease, the damage is seldom extensive. They appear to be highly resistant to insect attack, a characteristic that makes them all the more valuable in areas where turnip crops are uncertain. They are also excellent for introducing nitrogen into the soil and are valuable as green manure.

At present two varieties, Bitter Blue and Sweet Blue, are in general cultivation and fill a valuable place in the farm economy where they are being grown. A Sweet Yellow variety has also been tried.

Bitter Blue is the variety introduced to Canterbury more than 20 years ago. It is a strong-growing plant and pro-



Sheep grazing on blue lupins, which are a valuable fodder crop.

vides a fair amount of nutritious feed. It has taken the place of turnip crops in districts where turnips cannot be relied on. Bitter Blue lupins are not grown as a fattening crop, but rather as a crop that will provide a succulent bite when other feed is short. Though occasionally used for feed in spring, they are more popular for grazing in autumn and early winter. They are extremely bitter and sheep need to be introduced to them gradually. Ewes soon acquire a taste for the plants despite their bitterness. Once acquired, this taste does not appear ever to be forgotten, and sheep will then eat them readily at all times.

Sweet Blue variety is very similar to the Bitter Blue in appearance, but it has a low alkaloid content and lacks the bitterness. Sweet Blue lupins can

the bitterness. Sweet Blue lupins can be used for autumn and winter feed, but their chief advantage is their palatability and therefore their usefulness for lamb fattening. They appear to be more delicate than the bitter variety and require a slightly-better soil and a higher rainfall to produce the maximum results. Their palatability brings the disadvantage that hares will travel long distances to eat them in the young, succulent stage and have been known to clean up small areas completely. They are well worth a trial in areas where rape is likely to be damaged severely by diamond-backed moths, white butterfly, or club root.

Sweet Yellow lupins for good results appear to need warmer temperatures and are more suitable for North Island conditions than the blue varieties. Trials in the north have compared Sweet Yellow lupins with both Sweet Blue lupins and rape for lamb fattening. Results have been encouraging, particularly on the sand country of the Manawatu district, but scarcity of seed supplies has prevented a wider use of this variety. The seed shatters from the pod very easily, so that much is lost during harvest, and seed yields have been very discouraging. This variety has been grown in Canterbury, but has not proved very successful. Trials are now in progress with a non-shattering type of Sweet Yellow lupin which, if successful, probably will solve the seed-supply problem.



Lupins sometimes suffer from affacks of "sore shin," but the damage is seldom extensive. The healthy plant on the left is contrasted with others showing the disease at different stages.