

Sowing the Seed

Spring (September or October) is the time for sowing. Generally in a 3ft.-wide bed 6in. bands separated by 6in. spaces are used. The bands are made with a 6in.-wide plank, preferably one thicker than 1in. This is laid along the bed 3in. from one edge and walked on. The plank is then placed 6in. from and parallel to the first band and again walked on. The process is repeated for the third band, which should have its outer edge 3in. from the other edge of the bed.

The seed is spread evenly in these bands. The aim is to space the crop 1in. x 1in. if the trees are to be lifted as yearlings or 2in. x 2in. if they are to stay in the bed for 2 years. It is therefore desirable to know the germinative capacity of the seed being sown. If it is not possible to obtain this before sowing, the following table will serve as a rough guide for the commoner species. It is, however, an average of numerous results, so that considerable variation can be expected for any particular lot of seed.

NO. OF SEEDLINGS FROM 1lb. OF SEED

Species	Seedlings
Radiata pine (<i>Pinus radiata</i>)	10,000
Corsican pine (<i>P. laricio</i>)	16,000
Ponderosa pine (<i>P. ponderosa</i>)	4,000
Macrocarpa (<i>Cupressus macrocarpa</i>)	7,000
Lawson's cypress (<i>Chamaecyparis lawsoniana</i>)	25,000
Douglas fir (<i>Pseudotsuga taxifolia</i>)	15,000
Larch (<i>Larix decidua</i>)	6,000
Western red cedar (<i>Thuja plicata</i>)	60,000
Eucalyptus botryoides	120,000
<i>E. viminalis</i>	1,000,000

The seed spread in the bands should be pressed into the soil by pressure on the plank used in making the bands. The seed is then covered with sieved soil or sand to a depth roughly twice the thickness of the seed. If the soil is inclined to cake, sand is very much better for this purpose.

Protecting the Bed

Better results are obtained in most parts of the country if beds are protected in the early stages against drying by sun and wind, against unseasonable frosts, and against loss of seed by mice and birds. Usually this

protection is given by frames with side and end boards 6in. to 8in. wide over which is stretched coarse wire netting. This in turn is covered with open-mesh scrim, leafy branches, or slats held in place by wires stretched from end to end.

Such protection tends to produce conditions similar to those on the forest floor and at the same time stops loss from the activities of mice and birds. The result is a better strike and a bed which does not require watering except perhaps in an unusually dry spell.

Weeding is necessary throughout the period from the sowing of the seed to the lifting of the young trees. Certain hormone weedkillers are claimed to be safe for application among conifers, but they should be used with caution.

Later in the season the young trees have to be hardened off. This is done by raising one side of the frame for a short time each day, the period of exposure being increased gradually until the frames can be removed completely. The final removal should be reserved for a dull or a wet day.

Radio Broadcasts for Farmers during September

RADIO broadcasts for farmers will be given during September as follows:—

1YA Auckland, 7.45 p.m.

4 September—"Potato Growing", by D. M. E. Merry, Instructor in Agriculture, Department of Agriculture, Pukekohe.

11 September—Talk by officer of Animal Industry Division, Department of Agriculture, Auckland.

18 September—"Supplementary Cropping", by M. N. Walbran, Fields Instructor, Department of Agriculture, Pukekohe.

25 September—Talk by officer of Animal Industry Division, Department of Agriculture, Auckland.

1XH Hamilton, 12.33 p.m.

9 September—"Hygienic Milking and the Control of Mastitis", by G. R. Mackintosh, Livestock Instructor, Department of Agriculture, Hamilton.

16 September—"Spring Problems on the Dairy Farm", by J. R. Murray, Instructor in Agriculture, Department of Agriculture, Hamilton.

23 September—"Some Observations from Overseas", by D. J. Carter, Federated Farmers, Hamilton.

30 September—"Weed Control", by F. B. Thompson, Agricultural Chemist, Department of Agriculture Rukuhia Soil Research Station.

2XG Gisborne, 8 p.m.

3 September—"Stockowners' Question Time", by E. B. Smythe, Livestock Instructor, Department of Agriculture, Gisborne.

1YZ Rotorua, 7.15 p.m.

4 September—"Hydatid Disease and its Control", by K. G. B. Wilson, Livestock Instructor, Department of Agriculture, Opoitiki.

18 September—"Summer Cropping", by G. A. Blake, Instructor in Agriculture, Department of Agriculture, Matamata.

18 September (12.33 p.m.)—"Fitting Your Pig Production to Your Seasonal Milk Supply", by H. Preston, Supervisor, Rotorua District Pig Council.

2XA Wanganui, 8 p.m.

5 September—"For the Country Woman", by Mary MacDonald.

12 September—"The Radio Vet.", by S. Jamieson, Veterinarian, Department of Agriculture, Wanganui.

19 September—Pig production talk, by C. M. Bailey, Supervisor, Taranaki District Pig Council.

26 September—"Silage", by A. K. Booth, Instructor in Agriculture, Department of Agriculture, Wanganui.

2ZA Palmerston North, 12.33 p.m.

2 September—"Meat Inspection", by C. A. Hercus, Meat Inspector, Levin Abattoir, Levin.

9 September—"Growing Peas for Seed", by W. B. H. Smith, Fields Instructor, Department of Agriculture, Masterton.

16 September—"Fertilisers, What to Use", by G. N. Paulin, Horticultural Instructor, Department of Agriculture, Palmerston North.

23 September—"Hard Seed in Legumes", by A. V. Lithgow, Officer in Charge, Department of Agriculture Seed-testing Station, Palmerston North.

30 September—"Mechanisation of Silage Making", by J. O. Brasell, Farm Machinery Instructor, Department of Agriculture, Palmerston North.

2YZ Napier, 7.10 p.m.

10 September—"Soil Erosion", by J. L. Porter, Soil Conservator, Department of Agriculture, Hastings.

24 September—"Development of Hawke's Bay Hill Country", by F. H. Collin, Instructor in Agriculture, Department of Agriculture, Hastings.

3YA Christchurch, 12.20 p.m.

2 September—"Latest Development in Vegetable Growing", by R. G. Heasley, Horticultural Instructor, Department of Agriculture, Christchurch.

16 September—Review of "The New Zealand Journal of Agriculture" (September issue), by E. G. Smith, Instructor in Agriculture, Department of Agriculture, Rangiora.

4YA Dunedin and 4YZ Invercargill, 12.33 p.m.

2 September—"Wool Handling", by W. J. Hansen, Sheep and Wool Instructor, Department of Agriculture, Dunedin.

9 September—"Strawberry Culture", by W. G. Crawford, Horticultural Instructor, Department of Agriculture, Oamaru.

16 September—"Poultry Hygiene", by M. E. Sutton, Poultry Instructor, Department of Agriculture, Dunedin.

23 September—"Crops for Spring Sowing", by H. A. Duff, Fields Instructor, Department of Agriculture, Dunedin.

30 September—"Recent Research in Bloat", by I. M. Cairney, Veterinarian, Department of Agriculture, Dunedin.

4YZ Invercargill (following joint programme from 4YA and 4YZ)

2 September—"Drainage", by I. F. Falconer, Drainage Advisory Officer, Department of Agriculture, Invercargill.

9 September—"Pig Meat", by F. D. Usher, Supervising Meat Inspector, Department of Agriculture, Makarewa.

16 September—"Topdressing of Tussock Grassland", by T. G. Sewell, Instructor in Agriculture, Department of Agriculture, Gore.

23 September—"Mammitis in Ewes", by R. G. Buchan, Livestock Instructor, Department of Agriculture, Gore.

30 September—"Farm Development in Northern Southland", by G. W. Nixon, Instructor in Agriculture, Department of Agriculture, Invercargill.