

ing the past fourteen years. A large proportion of the trees planted have died, but a few have manifested unusual individual hardiness and have survived. The survivors have gradually become acclimatized and now appear to be quite hardy. They have grown to be handsome specimens, and good examples of this species may now be found at both of the North-west Experimental Farms. As some of these trees have begun to bear cones, seed will shortly be obtainable from them for sowing, and trees grown from such seed will probably be quite hardy from the start.

*Picea pungens*, Engelm. Rocky Mountain Blue Spruce.

This is probably the most attractive evergreen of recent introduction. It is found at high elevations in Colorado where it is seen of various tints of colour from a plain green, through different shades of steely blue, some slightly blue while others are of a deep, bright, steely or greyish shade of a very striking character. This blue colour in the best of specimens almost disappears in winter, but with the first warm days of spring the lower branches of the tree begin to brighten, and a deep bluish tint gradually creeps upward until it pervades the whole tree. By this time the buds begin to burst and the new growth pushes out of a much brighter shade, and this bright colour is maintained until the autumn when it changes gradually to a deep green. The tree has a compact pyramidal habit with the branches produced each year extending almost horizontally, showing more or less distinctly the separate layers of annual growth, giving the tree a storied appearance. The leaves are longer and much stiffer than in most of the other species of spruce. The blue colour of the foliage is produced by a waxy secretion on the needle-like leaves, a sort of bloom which when rubbed is easily removed. The varying shades of colour in different trees results from the relative density and brightness of this bluish bloom. Nurserymen engaged in propagating this spruce usually select seed from the bluest specimens, when a considerable proportion of the seedlings usually show the blue colour more or less strongly. The seedlings, however, vary much in this respect. In Europe this tree is propagated by grafting twigs from some of the bluest trees on young Norway or white spruce, when the young trees so grown are all uniformly blue. In Europe these grafted trees of *Picea pungens* are usually sold under the name of *P. Parryana glauca*.

The Rocky Mountain Blue Spruce has been under test both at Brandon and Indian Head since 1896, and has proven quite hardy, see Plate VI, fig. 1 from photo of specimen at Indian Head. For several years the specimens planted made slow growth, and occasionally showed slight injury from winter, but since they have become well established their growth has been satisfactory, and for the past six years they have shown no indication of injury from winter.

PINUS. PINE.

There are not many of the pines which furnish satisfactory material for planting on the North-west plains. Since they have but few fibrous roots, they are difficult to transplant, and efforts to grow pines are sometimes unsuccessful for this reason rather than from lack of hardiness.

*Pinus divaricata*, Dum.-Cours., = *P. Banksiana*, Lamb. Labrador Pine, Banksian Pine, Jack Pine.

This is a northern species with a very wide distribution. Macoun says it extends from Halifax, Nova Scotia, north-westerly to the Athabasca river and northerly down the Mackenzie river to the Arctic circle. When grown without being crowded this is rather a pretty tree. The leaves are in clusters of two, are rather short, seldom over an inch long, more or less curved and of a light green colour. It is difficult to transplant, and the efforts made to move young trees from the districts about Rat Portage, Prince Albert and Edmonton to the North-west Experimental Farms have