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## RAGWORT (Senecio Jacobaea L.) THISTLE FAMILY. PLATE XLI. (Facing p. 104)

Common Names: Other names given to this weed are British ragwort, tansy-ragwort, staggerwort, and stinking-willie.

DESCRIPTION: The common ragwort is a perennial (or biennial) with short, thick rootstocks. It is sometimes quite woolly or almost devoid of hairs. The stems are stout, simple or branched above, with deeply-lobed and incised green leaves. The flower heads are arranged in a broad, flat-topped cluster, each hand bright yellow, in form resembling a small daisy. It is in full bloom from July to September. The seeds are small and easily blown about by the wind.

DISTRIBUTION: Ragwort has been introduced from Europe, and is now naturalized in Canada from Newfoundland to Quebec and Ontario. It is found in ballast, along roadsides, in waste places and pastures.

Poisonous Properties: This weed has been the cause of considerable loss among eattle in Canada. At first it was not generally recognized that there was any connection between ragwort and the serious disease of the liver (hepatic cirrhosis) known in Canada as the Pictou cattle disease. The late Dr. Fletcher called attention to this suggestion in 1891. "This plant," he says, "is well known in Pictou county, and it is stated that the majority of the farmers there believe that to it and it alone are they indebted for what is known as the 'Pictou cattle disease.'"

At that time the average yearly loss in Pictou county, Nova Scotia, was 200 head of cattle. The Dominion Department of Agriculture made careful and extensive investigations (1903-6) which proved the weed ragwort to be the cause of the disease. As it was found that sheep were capable of assimilating the plant without injury, it was kept in check by pasturing them on the infested areas.

In South Africa the same disease, locally called Molteno cattle sickness, appeared among horses as well as cattle, and was attributed to a closely allied species of ragwort. In New Zealand considerable attention was given to this disease among horses, under the name of the Winton disease, and a great effort was made to eradicate the weed (Senecio Jacobaea). With this object in view, sheep were pastured on an area of 4,000 acres where ragwort grew very abundantly. Although, in about a year's time, several mortalities among the sheep occurred, Gilruth came to the conclusion that, if the weed is not too prevalent, sheep may, with a few exceptions, graze upon it daily without injury.

In England, recent poisoning (1917) of cattle has been reported (Board of Agriculture) from feeding them on dried forage containing ragwort. In this case, as in others, the feeding had been going on for a considerable period before any visible effects of the poison occurred,