

John A. Raper

*Zonation Committee
Variety Testing*

REPORT OF THE COMMITTEE ON THE CO-ORDINATION OF CEREAL VARIETY ZONES IN THE PRAIRIE PROVINCES¹

The Cereal Variety Zonation Committee of the Western Canadian Society of Agronomy was formed at the Edmonton meeting of the society in December, 1929, and consisted of the chairmen of the cereal variety committees of the three prairie provinces. At the annual meeting of the society in Winnipeg in December, 1930, the committee was enlarged. The purpose of the committee is to co-ordinate the cereal variety zone boundaries at the provincial boundaries of the three prairie provinces. The committee is composed as follows: Dr. J. B. Harrington (chairman), University of Saskatchewan, Saskatoon, Saskatchewan; Dr. O. S. Aamodt, University of Alberta, Edmonton; Mr. J. G. Davidson, Dominion Experimental Farm, Indian Head, Saskatchewan; Professor A. T. Elders, Manitoba Agricultural College, Winnipeg; Mr. W. D. Hays, Dominion Experimental Farm, Lethbridge, Alberta; Mr. S. J. Sigfusson, Dominion Experimental Farm, Brandon, Manitoba.

Varietal zonation in Western Canada was undertaken on a provincial basis in 1927. Previous to 1927, Mr. L. H. Newman, Dominion Cerealists of the Dominion Experimental Farms Branch, did pioneer work in that connection. He commenced in 1924 a series of co-operative comparative variety tests with farmers in various parts of the Prairie Provinces with the object of preparing a map defining zones within which certain varieties could be recommended safely. In 1927 the Alberta Varietal Zonation Committee was appointed, data were collected and a preliminary map was made. In the same year the Manitoba agronomists outlined a preliminary cereal variety zonation of their province and this was published through the Wheat Pool in 1928. In Saskatchewan, the zonation of the province for wheat, barley and oats was proposed by the Cereal Variety Committee in February, 1928, at the first conference of Saskatchewan agronomists, and a zone map was established. In 1929, 1930 and 1931 the zone maps of the different provinces were amended as necessary and given publicity in various ways. With the publication of cereal variety zones in the three prairie provinces it became evident during 1930 that some co-ordination of the zone boundaries should be effected so that the zone maps of adjacent provinces would be consistent. Naturally, farmers living near a provincial boundary would be confused by a zone line of one province reaching the boundary twenty or thirty miles from a comparable zone line of an adjacent province.

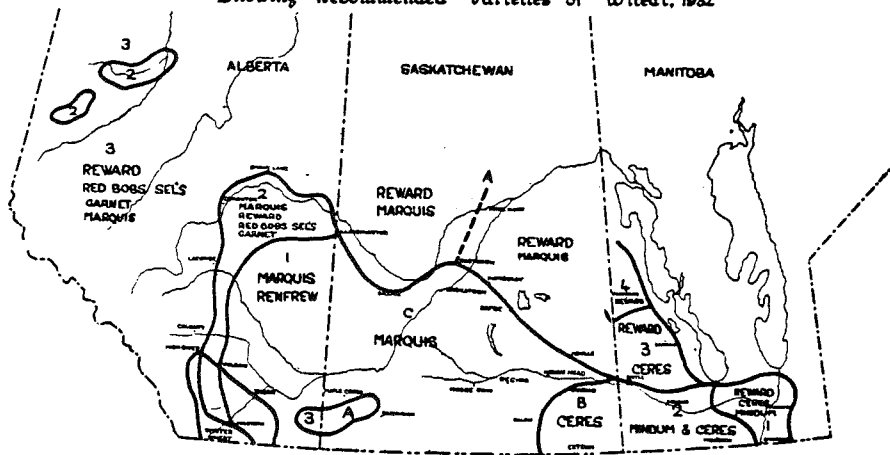
The committee on varietal zonation had a brief meeting before the end of the meeting of the Western Canadian Society of Agronomy in December, 1930. Tentative adjustments were made at that time, and later by means of correspondence final changes in the eastern extremities of the Alberta zone boundaries, the western extremities of the Manitoba zone boundaries, and the extremities of the Saskatchewan zone lines at both boundaries were made and approved by the respective cereal committees of the three provinces. The co-ordinated zone boundaries established early in 1931 are the same now as no changes were made during the past winter.

Following is a brief description of the zones and their boundaries as far as the work of this committee is concerned. In Manitoba the boundary between Zones 2 and 3 reaches Saskatchewan between townships 17 and 18 where it becomes the boundary between Zones A and B in Saskatchewan. South of this line, the

¹Presented by the chairman at the Annual Meeting of the Western Canadian Society of Agronomy at Winnipeg, June 14, 1932, in conjunction with the Annual Convention of the Canadian Society of Technical Agriculturists.

CEREAL VARIETY ZONE MAP

Showing Recommended Varieties of Wheat, 1932



wheats recommended are Mindum and Ceres in Manitoba and Ceres in Saskatchewan. North of this line Reward and, to a limited extent, Marquis are recommended in Saskatchewan whereas Ceres, and further north, Reward are recommended in Manitoba. Considering the greater rust hazard in Manitoba, the recommendations are quite consistent. The boundary between Saskatchewan Zones A and C reaches Alberta between townships 47 and 48 where it forks, becoming to the north the boundary between Alberta Zones 2 and 3 and to the west, the boundary between Zones 1 and 2. In Saskatchewan, Marquis is recommended for Zone C, and Reward or Marquis to the north in Zone A. In Alberta, the longest season zone (Zone 1) has Marquis and Renfrew recommended, Zone 2 has Marquis, Reward, Red Bobs Selections and Garnet in the order named and the short season zone (Zone 3) has Reward, Red Bobs Selections, Garnet and Marquis recommended in the order named. The Cypress Hills region, a high elevation area lying in the extreme southeastern part of Alberta and southwestern part of Saskatchewan is classed as part of the short season zone in each province. The southern boundary of this area crosses the Alberta-Saskatchewan line between townships 4 and 5 and the northern boundary crosses in the middle of township 9.

There is still one point where some question might arise as to the zone co-ordination. The boundary between Manitoba Zones 3 and 4 reaches the Saskatchewan boundary at about township 34 but there is no corresponding zone line in Saskatchewan. It is possible that a further northern zone may be established in Saskatchewan which would be bounded on the south by a line meeting the Manitoba boundary between Zones 3 and 4 and connecting at the Alberta boundary with the line between Zones 2 and 3 at about township 52 where the line originally reached the Saskatchewan boundary.

Figure 1 shows the co-ordinated zones of the three prairie provinces with the recommended varieties of wheat. The Committee wishes to point out that while definite zones make necessary the exact location of boundary lines and while the co-ordination of these lines with those of the zones of the adjacent provinces requires that they be described accurately, it should be remembered that a line separating two zones is arbitrary. The Committee also wishes to point out that only those varieties are recommended which have proven satisfactory for general usage over relatively large areas. In this connection the Committee recognizes the

fact that soil types vary greatly within the different zones and that the best variety in a certain local district is sometimes one that is not recommended in general for the zone concerned. Information on these exceptional cases is usually obtainable from the nearest experiment station.

The work of the Varietal Zonation Committee has been comparatively light due to the excellent co-operation of the cereal committees of the three provinces. There is every reason to believe that subsequent changes that may be made in the zone boundaries or the recommendations of any of the provinces will be made with full regard to the boundary lines and recommendations of the adjacent provinces. This is to be accomplished by the provincial cereal committees informing the Varietal Zonation Committee of any proposed changes at the provincial boundaries so that that committee may arrange whatever adjustments are necessary for the maintenance of zone co-ordination.

J. B. HARRINGTON,
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