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REPORT OF THE VARIETY ZONE CO-ORDINATION  
COMMITTEE OF THE WESTERN CANADIAN  
SOCIETY OF AGRONOMY

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## REPORT OF THE VARIETY ZONE CO-ORDINATION COMMITTEE OF THE WESTERN CANADIAN SOCIETY OF AGRONOMY<sup>1</sup>

The Variety Zone Co-ordination Committee was formed at the Edmonton meeting of the Western Canadian Society of Agronomy in 1929 for the purpose of co-ordinating the cereal variety zones of the Prairie Provinces, with respect to the designations of the zones and the location of their boundaries. The committee is composed as follows: Dr. J. B. Harrington (*Chairman*), University of Saskatchewan, Saskatoon, Saskatchewan; Mr. W. J. Breakey, Dominion Experimental Farm, Morden, Manitoba; Mr. J. G. Davidson, Dominion Experimental Farm, Indian Head, Saskatchewan; Dr. C. H. Goulden, Dominion Rust Research Laboratory, Winnipeg, Manitoba; Mr. W. D. Hay, Dominion Experimental Farm, Lethbridge, Alberta; Dr. K. W. Neatby, University of Alberta, Edmonton, Alberta.

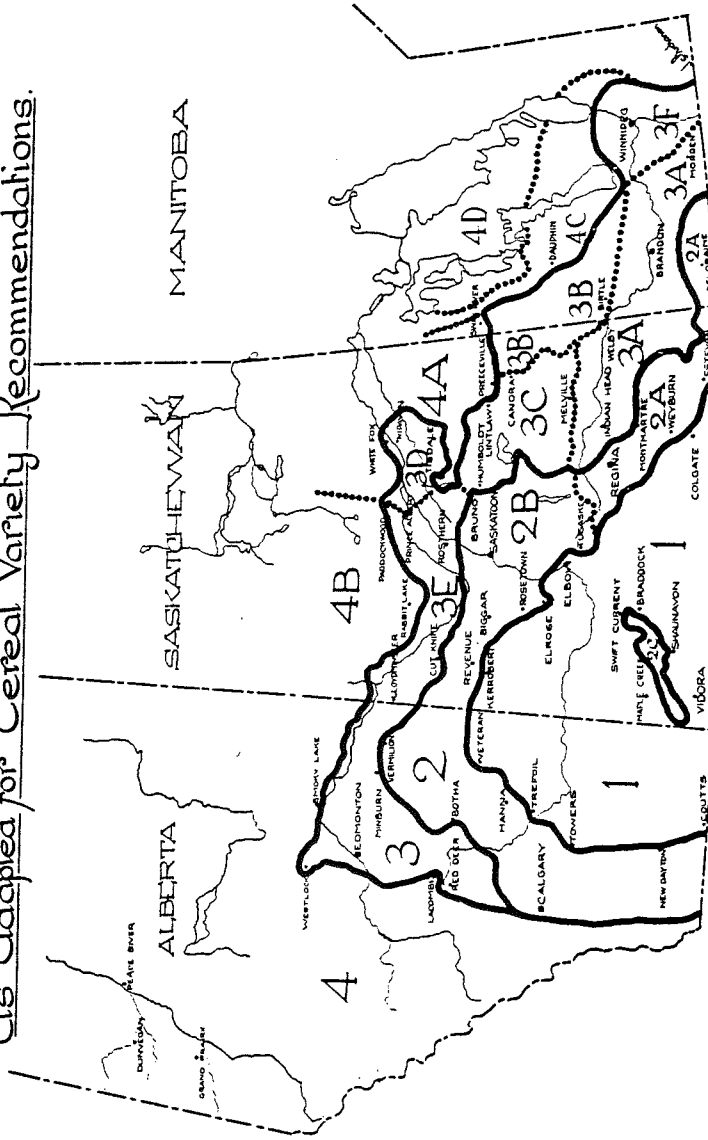
The 1932 report of the committee was published in *Scientific Agriculture*, 13 : 473-475, March, 1933, and shows on page 474 a map of the Prairie Provinces in which the cereal zones of the three provinces were co-ordinated at the provincial boundaries, but not yet co-ordinated as to designations of zones. At Edmonton, in 1935, the committee was able to announce co-ordination as to both boundaries and designations, but there still existed within the different provinces some lack of similarity as to the basis upon which to constitute cereal zones. They were all more or less on a soil-climatic basis, with exceptions as in the case of southeastern Saskatchewan.

Early in 1936, the agronomists of Saskatchewan and Alberta took the further step of placing their cereal zones fully on a soil-climatic basis. This was in accord with the previous action of the Manitoba agronomists. The matter of keeping the zone boundaries co-ordinated was a simple matter. It was decided recently by the Saskatchewan and Alberta cereal committees that the zones should be numbered 1, 2, 3 and 4, the numbers referring to: (1) the light brown, short grass, treeless prairie, (2) the dark brown treeless prairie, (3) the aspen grove and northern black soils, and (4) the wooded and grey forests soils.

The Saskatchewan Cereal Committee found it advisable to subdivide the main soil-climatic zones to facilitate cereal variety recommendations and they adopted the method of designating the sub-zones by letters following the zone numbers. The Alberta Cereal Committee did not disagree with this plan but found no need of using sub-divisions at the present time. The Manitoba Cereal Committee will not have its 1936 meeting until fall and, therefore, has not made definite pronouncements as to the use of the sub-zone designations. However, the matter of zone designations was taken up with a number of members of the Manitoba Committee thoroughly by correspondence and they were wholeheartedly in favour of the use of the method adopted in Saskatchewan. They suggested that a presentation of the co-ordinated zone map for the three provinces might well tentatively show the Manitoba zones as they will appear if fully co-ordinated with the Saskatchewan zone designations. The committee, therefore, presents the accompanying chart which shows

<sup>1</sup> As given at the Annual Meeting of the Western Canadian Society of Agronomy on June 21, 1936, at Swift Current, Saskatchewan.

SOIL-CLIMATIC ZONES OF THE PRAIRIE PROVINCES  
As Adapted for Cereal Variety Recommendations.



Co-ordination of the Zone Boundaries and Designations Effected  
by the Variety Zone Co-ordination Committee of the Western Canadian  
Society of Agronomy.

the co-ordinated zone map as adopted in Alberta and Saskatchewan and likely to be adopted in Manitoba. (NOTE: The Manitoba Agronomists adopted these designations and boundaries at the annual meeting in December, 1936.)

The co-ordination committee feel that this map, culminating as it does some eight years of zone evolution, is a thing of much value. It is felt that the adoption of the natural soil-climatic zones is a sound basis not only for cereal variety recommendations but also for recommendations concerning most other aspects of Western Agriculture. For several years the agrostologists have used a soil zone map as their basic consideration. In 1936, the Saskatchewan Weed and Farm Machinery Committees adopted the soil-climatic zones as fundamental in discussions of recommendations. There is little question but that recommendations as to farm procedure and management must have the soil-climatic zones as their foundation. The co-ordination committee believe that the more thoroughly the western agriculturist understands the characteristics of and differences between the soil-climatic zones, the more intelligently he will be able to choose crop varieties and decide how to handle the other aspects of his farm business.

The present variety zone map is a good example of friendly co-operative achievement. It is not a finished product. Undoubtedly the evolution will proceed further. Problems of co-ordination will arise, as in the past, but there is every indication that they will be solved easily and satisfactorily, as in the past. The committee wishes to express here its sincere appreciation of the wholehearted support it has had from the agronomists of the three provinces in its work of co-ordination during the past eight years.

J. B. HARRINGTON,  
Professor of Field Husbandry,  
University of Saskatchewan.

June 21, 1936.

**Discussion Respecting the Co-ordination of Cereal Variety Recommendations, in Connection with the June, 1936, Report of the Variety Zone Co-ordination Committee of the Western Canadian Society of Agronomy.<sup>3</sup>**

From the viewpoint of an interprovincial co-ordinating committee, the closest possible amount of agreement in varietal recommendations is desirable. It is not easy, however, to define agreement in the matter of varietal recommendations. It is obviously unreasonable to expect each province to recommend the same varieties. Conditions vary a great deal from Morden to Beaver Lodge and from Lethbridge to Melfort, and varieties must be recommended according to their performance in the different soil-climatic zones and according to their resistance to the natural enemies which are likely to infest given areas.

This means that while some varieties of wide adaptation may be recommended in parts of all three provinces, most varieties will only warrant recommendations in one, or perhaps two, of the provinces. The provincial cereal committees are the proper authorities for drawing up the varietal recommendations for the different provinces. In a case where a recommendation of one province profoundly differs

<sup>3</sup> Discussion revised January 6, 1936.

from the recommendations of an adjacent province with respect to similar soil-climatic zones adjacent at the provincial boundary, the co-ordinating committee can probably assist in helping the two provincial committees concerned to remedy the inconsistency.

Varietal recommendations in the Prairie Provinces have, in the past, agreed fairly well and, on the whole, they show reasonably satisfactory co-ordination at the present time. Considering wheat first, during the past few years the Manitoba cerealists have recommended Ceres, Reward and Mindum for the areas of Manitoba next to Saskatchewan. The Saskatchewan recommendations for the areas next to Manitoba were Ceres, Reward and Marquis. Considering the greater rust hazard in Manitoba, it is to be expected that the moderately resistant durum, Mindum, would be recommended in place of Marquis. The situation at the Alberta-Saskatchewan boundary has also been logical. Marquis has been recommended on both sides. In eastern Alberta, Red Bobs strains have been recommended, while in Saskatchewan they have not, but considering the greater rust hazard in Saskatchewan and the high susceptibility of the Red Bobs strains, this difference is quite reasonable. Garnet is recommended in the shorter season zones in Alberta, but not far east of Edmonton nor in Saskatchewan where the frost hazard is less.

A few months ago, Reliance was recommended for Zone 1 in Saskatchewan and Thatcher was recommended for most other parts of the province. In accord with this action there is the recent recommendation of Canus in Zone 1 of Alberta and of Thatcher in Manitoba. Canus is a variety having the same parentage as Reliance and resembling Reliance in its ability to resist drought and yield well. Thatcher, on account of its high rust resistance and yielding capacity suits Manitoba and the eastern half of Saskatchewan particularly well.

In oats, the situation is satisfactory. Banner and Victory are the principal varieties recommended in each of the three provinces. In Manitoba and eastern Saskatchewan where the rust hazard is great, the resistant variety Anthony is recommended. Where earliness of maturity is desired Gopher is recommended in Saskatchewan, and Legacy and Alaska in Alberta. These three varieties do not differ very significantly and none of them are recommended for Zone 1, the dry short grass prairie region, which includes much of the interprovincial boundary. The difference in the oat recommendations, therefore, can hardly be considered important.

The barley situation is also quite logical. In the most favourable barley growing districts of the West, the malting Barley O.A.C. 21 is recommended in each province. For feed use, the variety Trebi is recommended in each province. Hannchen is well suited to the drier parts of the West and is recommended in Alberta and Saskatchewan. The smooth-awn variety, Regal, is recommended in all zones of Saskatchewan. In Alberta another smooth-awn variety named Newal is recommended in all zones and Regal is recommended for Zones 1 and 2. In general value, the two varieties are similar but their adaptation differs somewhat. In Manitoba the smooth-awned variety Wisconsin 38 is recommended in all zones. This variety appears to be better adapted to Manitoba conditions than Regal and Newal.

In the minor crops, flax and rye, the situation is satisfactory and the details as to the varieties recommended need not be gone into here.

In conclusion, I feel that the matter of varietal recommendations is being taken care of reasonably satisfactorily and that in case of need, the co-ordination committee is in a good position to function with respect to the maintenance of consistency in the recommendations.

J. B. HARRINGTON, Chairman,  
W.C.S.A. Variety Zone  
Co-ordination Committee.

Saskatoon, Sask.,  
June 21, 1936.