

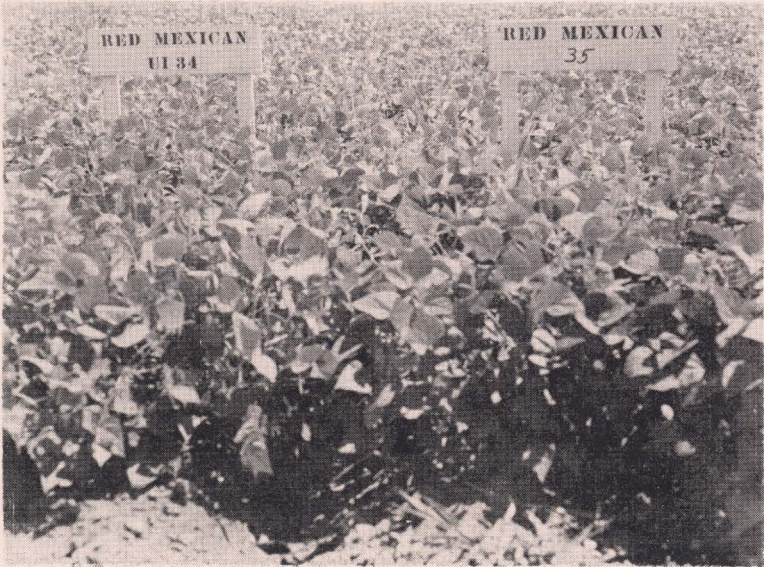


UNIVERSITY OF IDAHO
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Red Mexican UI-35

Mosaic Resistant Small Red Bean

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IDAHO Agricultural
Experiment Station

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RED MEXICAN UI-35

A Mosaic Resistant Small Red Bean

MARSHALL LEBARON*

Red Mexican UI-35, a small red bean, is similar to Red Mexican UI-3 and UI-34 which are presently grown in Idaho. This new variety has disease resistance added. It was selected from the cross of Red Mexican UI-34 x Great Northern UI-31 (1). The cross was made and the mosaic virus testing was done at the Bean Disease Laboratory greenhouse in Twin Falls. The final selection and seed increase was done at the Twin Falls Branch Experiment Station, University of Idaho, Kimberly, Idaho.

An improvement in the Red Mexican bean was needed to combat the seedborne mosaic virus that so often reduces yield in southern Idaho. It also was desirable to have a plant maturing earlier and with less foliage than present Red Mexican types. For these reasons Great Northern UI-31 was used to introduce resistance to bean mosaic virus 1A and shorten the season.

Red Mexican UI-35 is well adapted to Idaho growing conditions where Red Mexican beans

are now produced. It is resistant to curly top and common bean mosaic (BV1 and BV1A) viruses. At Kimberly it has consistently been from *five to seven days* earlier maturing than Red Mexican UI-34. However, this was not true for all areas where the two varieties have been compared. The seedling at emergence is taller and more upright than UI-34 which facilitates early cultivation (*the cover photo illustrates the similarity of plant type as the varieties near maturity*). The leaves of UI-35 are larger than UI-34, coarser and lighter green in color, approaching an intermediate type between the Red Mexican and Great Northern parent.

The seed of the two Red Mexican types are very similar in shape and color, but the UI-35 is the larger of the two. The difference in seed size is not expected to affect the market value of the new bean variety. It has an average of 1420 seeds per pound while UI-34 has an average of 1585 seeds per pound. (*Figures 1 and 2*).

* Superintendent, Twin Falls Branch Experiment Station, Kimberly, Idaho.

(1). Hungerford, C. W. July 1952. Disease resistant field beans for Idaho. Exp. Sta. Cir. 118.

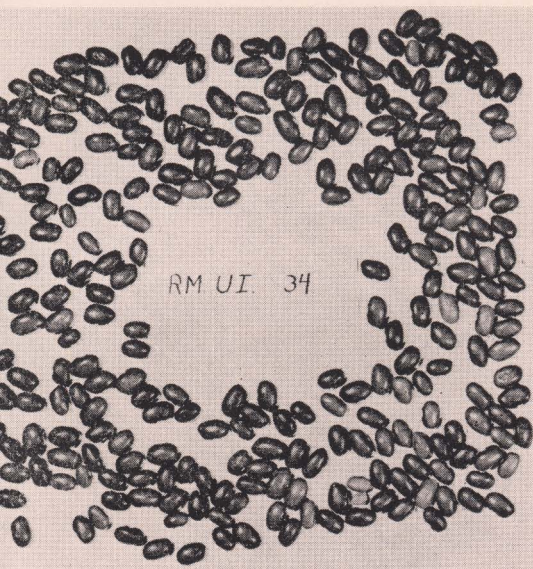


Figure 1

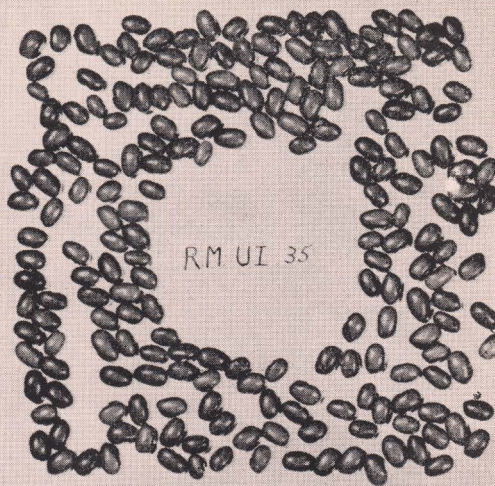


Figure 2

Table I.—The average yield in pounds per acre and maturity in days for Red Mexican UI-34 and Red Mexican UI-35 at nine test sites in the western United States. (Data taken from Western Regional Dry Bean Nursery report)

	RED MEXICAN UI-34			RED MEXICAN UI-35	
	No. years data (1)	Aver. yield pds/acre	Days to maturity	Aver. yield pds/acre	Days to maturity
Colorado	2	2016		2309	
Idaho (Twin Falls)	4	2575	103	2506	96
Montana (Huntley)	2	1343		1482	
Montana (Sydney)	1	2640		2900	
Nebraska	2	2238	113	2263	111
New Mexico	2	2683	97	2368	101
Washington	2	2396	114	3062	113
Wyoming (Powell)	2	2040		2250	
Wyoming (Torrington)	1	1779		2352	

(1)—Number of years for each yield average.