

The Science of Bio Magnetism is the Study of the Effects of Magnetism on Plant Growth



Carefully controlled scientific tests, over many years, prove that certain seeds magnetically treated germinate more uniformly and grow faster with resulting shorter growing seasons and greater crop yields. The Bio-Mag magnetic seed treater has been engineered and developed under the most stringent controls and specifications to create a product which embodies the practical application for the farmer of the most advanced techniques of the Science of Bio Magnetism.

**FEBRUARY 1975 RELEASE FROM AGRICULTURE CANADA  
RESEARCH STATION, LETHBRIDGE, ALBERTA -  
Magnetic Treatment of Seed - U.J. Pittman, Agronomist**

In field tests on cereals on dryland, yields of wheat and barley were increased substantially by using seed that had been treated in commercial magnetic seed treaters at the Lethbridge Research Station. In 1972, Manitou spring wheat and Galt barley grown from treated seed matured 3 to 5 days earlier and yielded about 2.6 bushels per acre more than that grown from untreated seed. In 1973, similar results were obtained. Treated seed of Sundance winter wheat and Neepawa spring wheat produced yields of 1.8 and 2.6 bushels per acre (7 percent and 12 percent) more than control seed. Yields of Galt barley were increased about 5 bushels per acre (8.5 percent) by treating the seed before sowing. Treatment of Glenlea, a utility wheat, produced yield increases of 10 to 15 percent at Lethbridge; however, at Saskatoon, Saskatchewan, the increase was about 5 percent. For unknown reasons, preseeding magnetic treatment had no visible effect on growth or yield of Sioux oats in either test year.

In 1974, tests were established at several places in southern Alberta. Galt barley grown from magnetically treated seed in seven of 10 tests. In two of the 10 tests, seed treatment had no effect on yield and in one test located in southeastern Alberta where it was very dry, Galt barley grown from magnetically treated seed yielded less than that grown from untreated seed. At that location, early growth was heaviest on plants grown from treated seed, and these then suffered more severely from drought at heading time than plants grown from control seed. Magnetically treated Betzes yielded from 1.1 to 4.1 bushels per acre more than the control in both of two tests.

Yield increases of 1.2 to 4.5 bushels per acre were obtained in three of four tests with Glenlea wheat as a result of magnetic treatment. Magnetic seed treatment had no effect on the yield of Wascana durum in two tests but in two others, yields were increased 1.4 and 2.6 bushels per acre, respectively. In a single test on Wakooma durum the average increase in yield was 1.3 bushels per acre.

Though we have results from only 1 year of testing, it appears that wheat and barley seed may be treated several weeks before planting. Galt barley and Neepawa wheat grown from seed treated in a commercial treater up to 6 weeks before seeding produced yield increases as large as those obtained from seed treated immediately before planting. Related research shows that Compana barley, after having been magnetically treated and stored in glass jars for 11 years, still produced about 80 percent more growth than similar untreated seed in germination tests.



# BIO-MAG



MAGNETIC SEED TREATER

Manufactured by Qsine Corporation Limited 1030 - 34th Avenue S.E. Calgary, Alberta T2G 1V4

The Bio-Mag magnetic seed treater is made of urethane, an extremely strong, virtually indestructible, durable and wear resistant material.

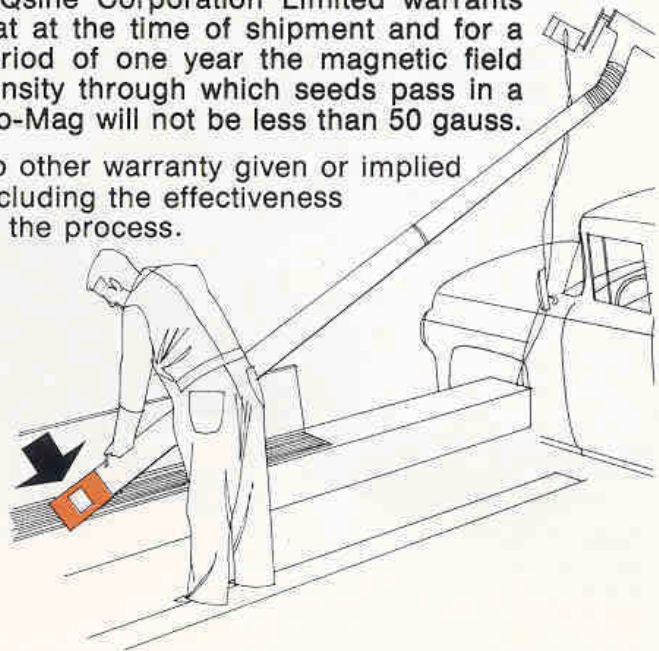
The magnet used is a cylindrical permanent metal magnet, mounted in line. This ensures that each seed passing through the Bio-Mag is exposed to two fields of magnetic force. The metal magnet mounted in urethane, is less brittle and susceptible to breakage than other type magnets.

The design of the Bio-Mag makes four attaching diameters available as the inner and outer surface of either end may be used as the attaching surface.

The Bio-Mag is light, weighing approximately one pound, making it practical to use on the discharge end of a drill filler and can be easily attached with screws, pop rivets or small bolts.

Qsine Corporation Limited warrants that at the time of shipment and for a period of one year the magnetic field density through which seeds pass in a Bio-Mag will not be less than 50 gauss.

No other warranty given or implied including the effectiveness of the process.





**TREATED** ●

**(7 DAYS)**



**NOT  
TREATED**

### **Plant Growth**

The conclusive evidence now available regarding the effects of magnetic treatment on plant growth is amply demonstrated by such examples as the photograph above showing an actual test of seeds treated by a Bio-Mag magnetic seed treater.

### **Increased Yields**

Increased yields of up to 15% have been observed in Southern Alberta when seeds were magnetically treated prior to planting. Galt Barley grown from magnetically treated seed yielded 1.3 to 12.1 bushels per acre more than that grown from untreated seeds in seven of ten tests.

### **Shorter Germination**

A shorter germination period, better root growth, and earlier harvesting are more of the benefits achieved from magnetic treatment of seeds. The resultant advantages for multi cropping in some latitudes is evident and the advantage of early cropping in the colder latitudes is equally important.



MAGNETIC SEED TREATER