

for all crops and soils

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COVER STORY

IN WYOMING, Robert Zwemer, of Frannie, had a problem with Alkali and Salts, until he used Medina. He applied Medina to all but 24 rows of his corn crop—which he left for a test. "Medina brought this field back into profitable production in only one year. Before this it never produced a good crop," says Zwemer.

Extreme problems will take longer to remedy, but Medina can help you produce higher yields and better quality as it did for Robert Zwemer.

Medina

With more than 15 years of proven performance, Medina has been used on all types of crops and soils—in almost all of the United States and in 25 foreign countries.

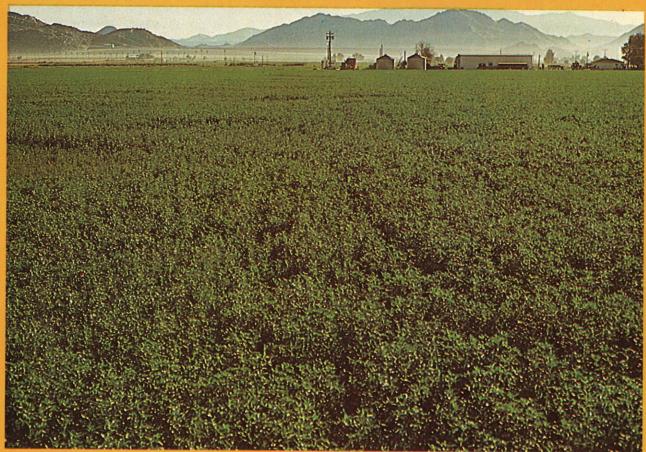
Medina is a complex combination of micronutrients and secondary nutrients which are essential for all aerobic soil organisms and plants. Research has shown that often the lack of a single atom of an essential nutrient can inhibit the normal growth of plants. In most states only iron, magnesium and zinc are registered micronutrients and are shown on the fertilizer label. However, the other essential nutrients are available in every drop of Medina and Medina II. Some states do not require trace elements be shown on the label.

Medina is the best answer for many problems facing farmers and gardeners today. This book shows profitable results on several crops and provides grower testimony as well as results from University and other research groups. It would

require a brochure many times this large to show what Medina does on all crops, gardens and lawns. But, for brevity, we elected to illustrate Medina's results on major crops and problem soils. It works equally well on other crops. Medina may be the most important product you will ever add to your farming program.

MEDINA II is a second generation product designed specifically for seed treatment and foliar spray. It contains more than 40 trace elements plus other natural substances necessary for plants. We recommend Medina II for all foliar sprays, and it will do an equally good job as a soil-applied material.

Results shown in this brochure are typical of thousands of tests on Medina which have been conducted over the past 15 years. You may or may not do as well as these growers have done, but you owe it to yourself to try Medina and Medina II and measure the difference for yourself.



in Alfalfa

WHAT IS AN EXTRA TON OF ALFALFA WORTH?

All it costs to make the extra ton or more is a gallon of Medina per acre.

Don Clark, Peris, California left Medina off one 90-foot strip of his alfalfa. In the photo above you can note the scald spots in that strip.

Don made over a ton of alfalfa per acre **more**, where he used Medina. This is typical of many alfalfa growers throughout the country. Clark is using Medina on all of his 300 acres now.

For best results on alfalfa, grass and hay crops:

- Apply 1 gallon of Medina or Medina II per acre in early spring before growth starts. No need to work it in.
- 2. Apply 1 gallon of Medina II per acre as soon as possible up to 7 or 8 days after cutting.
- 3. After either of the above, cut 2 times and reapply ½ to 1 gallon per acre.

Results that count... in Alfalfa

IN TEXAS, Dudley Storey III, of Cotulla, made a laboratory analysis of his alfalfa at a time when he was not using Medina. Tests showed his protein to be at 8.71 and TDN to be 47.

Later, during the winter months he applied a gallon of Medina to each acre. Laboratory tests for the following crops showed:

1st cutting—Protein at 21, (no TDN test run). 2nd cutting—Protein at 22, TDN 60.38.

IN NEW MEXICO, B. C. Aaron, of Artesia, says: "You bet it helped. It's real good. Medina makes the soil take water better." Aaron had one alfalfa field that made 24 bales per acre on each of the first two cuttings. The soil was tight and water would hardly penetrate it. He used Medina on his next cutting and that same acreage made 56 bales to the acre.

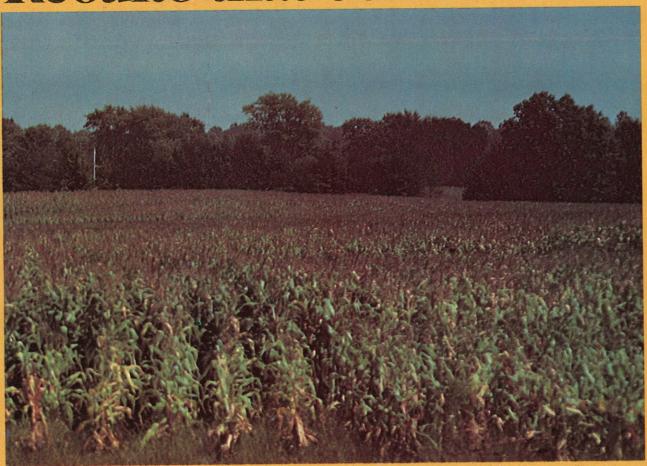
IN NEBRASKA, Rudolph Griess, of Aurora, says: "Before Medina treatment, when it would rain we would have ponds in all the low spots. After using Medina we had a five-inch rain with no run-off. It all soaked in. Then it turned dry before the second cutting. The Medina-treated field came right back with regrowth, while the untreated crop turned brown and had no regrowth. We made four cuttings where we used Medina and only two cuttings where we didn't use Medina."

IN OKLAHOMA, Bob Curtis, of Minco, who is a dryland alfalfa grower, had 30 lower acres of a field that would not produce alfalfa due to high alkali content. He applied one gallon of Medina to the stubborn 30 acres, then seeded alfalfa. He attained a near-perfect stand in ground so troubled that it wouldn't even sprout milo seed. His first year production was 300 pounds of alfalfa seed and 3½ tons of hay. "By bringing this 30 acres back into production, it has increased production from the overall field by at least 50 percent," says Curtis.

IN CALIFORNIA, Floyd Lillard, of Hemet, reports Medina-treated alfalfa did not freeze down while the untreated did. As a result, the Medina crop will get an extra cutting.

IN COLORADO, Jim & Norma Chittenden, of Kersey, are full-time Medina sales people and reported they do not have one customer that used Medina in 1975 not using it again in 1976. One of their alfalfa growers, Don Solis, reported a ton more alfalfa with almost 2% more protein.

IN NEBRASKA, at Kenesaw, on alfalfa land owned by Cuprem, Inc., it was found that the most benefit from Medina was from the first cutting. On test strips, alfalfa was three inches higher than where no Medina was applied. Proof was so positive the firm applied Medina to all of its alfalfa acreage.



in Corn

UNIVERSITY FARM INCREASES CORN YIELD BY 12.99 BUSHELS PER ACRE.

When the liquid fertilizer and herbicide was being loaded for application at Southern Illinois University last spring, Eldon Shaffner, farm manager, had the applicator mix one gallon of Medina per acre in one of the two tank trucks. This resulted in spreading eight rows with Medina and eight rows without, over 220 acres of corn.

The photo above shows the rows with Medina were much greener, had more and larger ears, and withstood the dry weather better.

This was not a small plot test. It was done on a scale large enough to get meaningful results. At harvest the Medina corn produced 85.51 bushels

dry weight while the check produced only 72.52 bushels. This is a 12.99 bushel per acre (17.9%) increase for the Medina-treated corn.

Isn't it time to let Medina help you make greater corn profits too?

For best results on corn:

- Apply 1 gallon of Medina or Medina II ahead of planting. Medina may be mixed with liquid fertilizer and/or herbicides if broadcast.
- 2. Treat seed with Medina II.
- Apply Medina II as a foliar spray up to 45 days after stand is obtained. Earlier sprays give best results.

Results that count... in Corn

IN ILLINOIS, Gary Clark, of Gilson, is a corn grower who reports that he applied 1 gallon of Medina per acre, prior to planting, on part of his corn acreage. That corn produced 161 bushels per acre—against 138 bushels where no Medina was used. That's an increase of 23 bushels per acre for Medina.

IN COLORADO, Jess Rink, of Bristol, sprayed Medina directly on part of a corn field at the time he applied post-emergence herbicide. Three weeks later the Medina-sprayed corn was 8 to 12 inches taller than the other. "Medina increased my yield by 15 percent," says Rink. "It also loosened my soil so water penetrated more than 5 feet—whereas, on untreated soil, water penetrated only 14 to 16 inches."

IN NEBRASKA, Lyle De Journis, of Central City, says: "We had an 80-mile-an-hour wind through here about the time our corn was in hard dough. It broke off most of the stalks where we had not put Medina. Hardly a stalk was damaged where we had Medina. At harvest we had over 20 bushels to the acre more from Medina corn."

IN MISSOURI, H. D. Ham, of Quilin, stated: "I tested Medina on corn in 1974. Didn't tell anyone what I was doing. In June a neighbor came by, said what is going on? I told him I didn't know what he was talking about. He showed me to the row where we had Medina. Then I pulled out some weeds in the fence row and showed him the marker where we had started with Medina. At harvest the Medina corn made 222 bushels. No-Medina made 195 at 22% moisture.

"Now the soil is real mellow where we had Medina. The rest of the field has big clods. My neighbor and I both use Medina."

IN KANSAS, Glen Nightengale, Copeland, says: "I planted a fast-maturing corn following my spring wheat, using Medina on all but a few rows in the center of the field. The Medina corn was more uniform and made 11 bushels more than the no-Medina. The Medina corn had a much larger feeder-root system too."

Nightengale produced 228 bushels per acre, average, on 40 acres in 1976. He has used Medina on his place for three years, plus Medina II was used on the seed. The corn variety is Trojan 115A.

IN NEBRASKA, Rudolph Griess, of Aurora, made this statement: "I had a 10% better stand by actual count where I put Medina. This carried right through to harvest.

"My soil is hard—doesn't take water too good. Medina loosened the soil. It takes water much better—even where I cut the ground for leveling. This was so cloddy I couldn't get soil to cover my seed. It's sure different now with Medina."

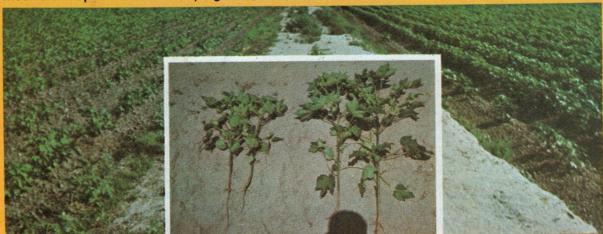
IN MISSOURI, Jim Roth, University of Missouri research station at Portageville, reported the following Medina test results:

No Medina Check =	=	Yield 78 bu.	Medina Increase
Medina Test I =	=	per acre 86 bu.	+ 8 bu. per acre
		per acre 93 bu.	(10.02%)
Wieuma rest II -		per acre	+ 15 bu. per acre



IN TEXAS, Medina reduced the percentage of dead cotton in research conducted by Dr. Elton Cook, at Lubbock Christian College. In the photo above, the left side of the field did not receive Medina as a part of its cultural program. Cotton

on the right was treated with Medina. The percentage of dead cotton ranged from 90% loss on the untreated side to less than 5% on the treated side.



IN NEW MEXICO, Medina saved hail-damaged cotton for B. C. Aaron, of Artesia. This photo shows two fields of cotton which were started alike. But in May they received severe hail damage. Within 36 to 48 hours the field pictured on

the right was treated with Medina. The result is obvious. The treated cotton saved the crop. Note the close-up of plants from the untreated field (left) and Medina-treated field (right).

in Cotton

For best results on cotton:

- Apply 1 gallon of Medina or Medina II per acre, ahead of planting. Medina may be mixed with liquid fertilizer or herbicides, except Dynap and 2,4-D.
- Medina II may be foliar-applied until plants start blooming. Use 1 gallon per acre. It may be applied with insecticide.

Results that count... in Cotton

IN MISSOURI, Wesley Hodges, of Matthews, reports a 1976 test using Medina on four acres of his cotton and four acres without—side-by-side. The results were as follows: Medina acres yielded 458 pounds of lint per acre versus 395 pounds from the acres with no Medina. Medina increased the yield by 63 pounds per acre or a total of 15.9%. Hodges' cotton was contracted at 60ϕ a pound. The 63 extra pounds gave him a \$37.80 gross increase per acre.

IN OKLAHOMA, Wayne Spears, of Lookeba, reported that Medina helped increase his cotton yield by 23.1%, and as a bonus he profited by a

4% improvement in quality.

IN TEXAS, J. H. West, of Bishop, uses Medina because, as he says, "A product has to make enough difference for me to see and be interested. Where I tested Medina I produced 21/4 bales per acre, and only 11/2 bales right beside it with no Medina."

IN TEXAS, Duncan Chapman, of Grandview, saw yields plagued by dead cotton. He started using Medina on one field with 90 to 95 percent dead cotton loss. In ensuing years, he saw gradual improvement. Four years later, in what he called "one of the worst of recent years for dead cotton," he had less than 3 percent dead cotton.

IN TEXAS, Dr. E. D. Cook, professor of agriculture at Lubbock Christian College, conducted a two-year test using Medina with 80 pounds of nitrogen and 45 pounds of phosphorus. Medina was used as a pre-plant treatment or as a foliar spray at early bloom—and it produced more lint cotton than the check plot. For the two-year period, Medina plots averaged 109 pounds more lint per acre than the check plot.



in Milo

YOUR MILO YIELDS CAN BE INCREASED.

IN ILLINOIS, Jim and Joe Van De Riet, of Waterloo, harvested a crop of barley, disced up the stubble, applied fertilizer and 1 gallon of Medina per acre before planting milo. On some of the acreage the Medina was omitted.

They report the following results: where no Medina was applied, the milo was at least a week later, uneven, and produced only 4,840 pounds per acre when corrected to 13% moisture. The Medina-treated milo was even and produced 5,680 pounds per acre at 13% moisture. Medina increased this milo by 840 pounds per acre—or 17% overall.

IN MISSOURI, in two years of University of Missouri tests, Medina averaged 862 pounds more per acre.

IN TEXAS, Ralph Stone, of Robstown, has used Medina for 8 years and over that time has increased his mile production by more than 1700 pounds per acre.

Maybe Medina is your means to greater milo production.

For best results:

- Apply 1 gallon of Medina or Medina II ahead of planting. Medina may be mixed with liquid fertilizer and/or herbicides if broadcast.
- 2. Treat seed with Medina II.
- Medina II may be applied as a foliar spray up to 45 days after stand is obtained. Earlier sprays give best results.

Results that count... in Milo

IN MISSOURI, University tests at Portageville in 1974 and '75 showed significant results for Medina on grain sorghum. In all experiments most optimum known cultural practices were followed including fertilizer treatments. Experiments consisted of randomized complete block design of four or more replications on soils varying from a sand to those of high clay content (gumbo).

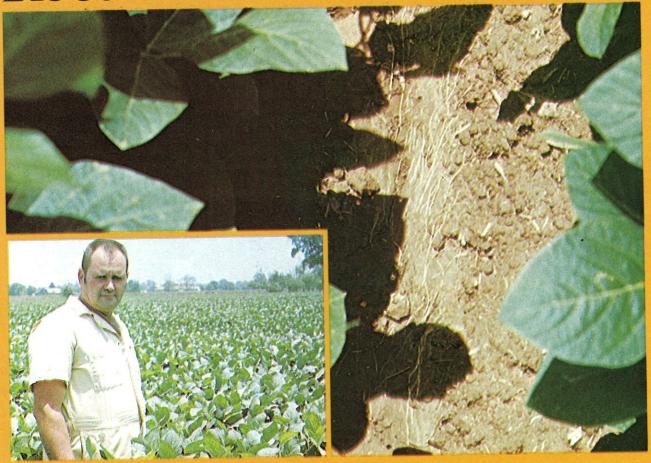
Grain sorghum responded favorably in both seasons 1974 and 1975 on two different soil types. The results are as follows:

Clay	Medina Gal/Acre At Planting	Foliar	Yield (Lbs/A)	Medina Increased Yield
Soil	1	1/2	4330	
	None	None	3869	461
	1	None	4601	\perp
	None	None	4092	509
Silt Loam				
Soil	1/2	1/2	6732	1275
	1	None	6661	1204
	1/2	1	6280	823
	1	1	6500	1043
	None	1 .	6634	1177
	None	2	6509	1052
	None	None	5457	

IN KANSAS, Clinton Peverley, of Geneseo, reports Medina has given him a 28.2 bushel-peracre increase in his milo over three years (108.2 bushels vs. 80 bushels)—and an increase of 4.1 pounds in bushel weight. "This was the best crop I've ever grown," says Peverley . . . An interesting situation, since the 1976 county average will run only about 40 bushels per acre due to drought.

IN TEXAS, Mark Hicks, of Hereford, says: "I believe we have found a good combination . . ." Mark, farming with his father Don Hicks, used 1 gallon of Medina along with 1500 pounds of composted manure to the acre. He made 10,800 pounds of grain sorghum to the acre.

IN TEXAS, George and Mike Paschell, of Vega, used 1 gallon of Medina per acre in split applications to produce 9,000 pounds of grain sorghum per acre. Their Medina-grown milo was matured and harvested before a severe ice storm hit the area. The Paschells and growers all around them suffered heavy grain losses where the milo was not grown with Medina and matured later.



in Soybeans

WOULD 13 MORE BUSHELS OF SOYBEANS PER ACRE BE WORTH THE EFFORT?

IN LOUISIANA, Glen Bridges, of Opelousas, had a piece of land that he called an old clay knoll—just an old hill with all the topsoil washed off. He tried many ways to break it up, but in 1972 he tried Medina. "I put a little Medina on there and got a little rain and we were able to break it up to plant and had a pretty good yield the first year," he says. "The soil became mellow. My 1974 crop was the best I'd had since I'd been farming.

"In one field I ran out of Medina just before I completed the field. Rather than go back and refill I just left the Medina off. I sure goofed up because it made 13 bushels less than the worst field, where I had Medina. I am sold on Medina and have continued to use it every year. There is no

question that it has made my soybeans more productive." By using Medina, Glen Bridges has had an average increase of more than eight bushels per acre.

Could your soybeans use a boost too? Give Medina a try.

For best results on soybeans:

- Apply 1 gallon of Medina or Medina II per acre ahead of planting. Medina may be mixed with liquid fertilizer or herbicides except Dynap and 2.4-D.
- 2. MEDINA II may be foliar-applied until plants start blooming. Use one gallon per acre. It may be applied with insecticide.

Results that count... in Soybeans

IN KANSAS, Clifford Schmidt, of Buhler, reported: "We made 18 bushels of soybeans with no Medina... and 31 bushels with Medina. All other cultural conditions and practices were the same. The leaves on our Medina beans looked like tobacco, they were so big."

IN MISSOURI, Millard Carter, of Steele, says: "I put the Medina on soybeans at planting—1/2 gallon per acre—and later put on another 1/2 gal-

lon by airplane just before bloom.

"Through the summer I noticed the big difference in the sandy spots. I had a 62-day dry spell. The beans that did not have Medina died. The Medina beans came on and made not quite a full crop, but some beans at least. It more than paid for the Medina.

"The root system was so much better where the Medina was—about 3 times the size as the non-treated beans. The soil was looser. I had a lot more nodules. Later on in the fall I seeded wheat with an airplane. The start is a lot better on the Medina ground than on the non-treated ground."

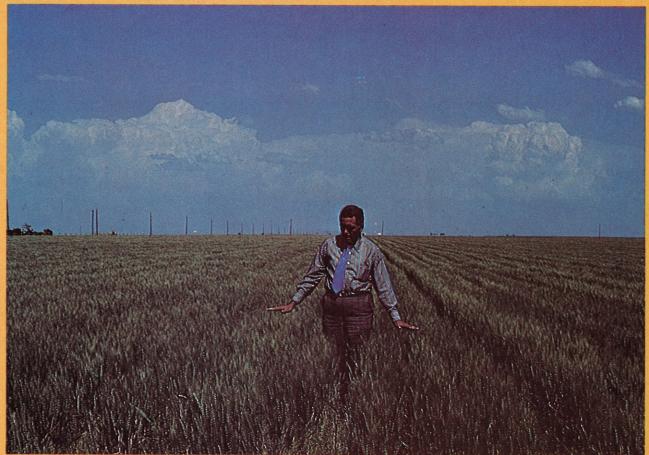
IN MISSISSIPPI, Billy Colbert of Houston reported: "I put Medina on land where I had trouble getting a stand in past crops. Last year I didn't have half a stand. This year these beans were planted the 25th of June and I have a uniform stand where they didn't drown out. The stem is a lot longer with more foliage. They have the best color I ever had . . . where the Medina was used. Where I didn't use Medina, the beans weren't as large, the color wasn't as good and they weren't as uniform. I could tell right to the row where I used the Medina. At harvest, I made 40 bushels where I used Medina, 25 bushels where I didn't."

IN MISSISSIPPI, Clifton Ray, of Pontotoc, used Medina in 1975 with good results, reporting: "My soybeans were 35 to 50 percent better where we used Medina. Beans looked like they were a foot taller, the roots about 3 times longer where we used Medina. Looked like we used 300 or 400 pounds of fertilizer where I used Medina and no fertilizer where I didn't use it. I put Medina on all 1200 acres in 1976!"

IN NEW JERSEY, Myron Harvey, of Woodstown, reported an increase of 25.3 bushels of soybeans where he used Medina. On 15 acres where he used Medina his beans yielded 45.9 bushels per acre, while on 35 acres with no

Medina, his yield was 20.6 bushels.

IN LOUISIANA, Birchman Laverne, of Opelousas, watched a neighbor's 40-acre soybean test . . . 20 with Medina and 20 without. It took 20 rows to fill the combine with no-Medina beans—only 16 rows to fill it with Medina-applied beans. That figured to be a 25% increase. After this, Laverne applied Medina to 1400 acres.



in Wheat

MEDINA-WHEAT MADE MORE PROFIT.

IN TEXAS, Don Hicks, of Hereford, made a 31½ per acre bushel increase in his wheat, where he used Medina. We wouldn't promise you would do as well as Don, but on average we would expect you to get 8 to 10 bushels more wheat with proper application of Medina.

For instance, Kansas wheat farmer, Del Young, made 50 bushels on wheat acreage without Medina and 80 bushels where he has been using Medina. A 30-bushel increase is significant—and profitable—for anyone's wheat program.

As a general rule we've found the longer you use Medina, the greater the results. And most farmers—wheat growers as well as other crops—

who use Medina become permanent users of the product. Dale Steele, of Ford, Kansas, tried Medina in 1969 and averaged 8 to 22 bushels more per acre. He is now one of those "long-term" Medina users.

Maybe your wheat could use a Medina boost. For best results on wheat:

Apply 1 gallon of Medina or Medina II per acre at or ahead of planting or apply 1 gallon of Medina II during the winter . . . up to early spring growth. Apply early to promote more stooling and a better root system. Medina may be mixed with liquid nitrogen in spring for top dressing.

Results that count... in Wheat

IN ARKANSAS, Clois Butler, of Rector, reports: "On wheat, we ran two 20-acre test strips of Medina in 600 acres; the Medina was applied by air just as spring growth started. In 36 hours we could see a darker color in the wheat. At harvest it was still visible. It was taller with Medina. Even our truck driver noticed it and asked what made the difference.

"We could tell again when we started cutting, by the way it was piling in the bins. We just couldn't believe such a small amount of Medina could make as much difference as it did since we used a high rate of fertilizer. Our average for 600 acres is 39.08 bushels per acre. Our Medina plots yielded a fraction over 50 bushels per acre. In other words Medina made 9-11 bushels more wheat."

IN KANSAS, Frank Rowley, Jr. of Valley Center, says: "A combination of practices is responsible for my wheat yields jumping by more than 15 bushels per acre in 1975, such as . . . Urea for my nitrogen, energized seed, good trace mineral program, and Medina to activate the soil microorganisms. My bushel weight has hit 64 this year. Medina has made my soil mellow . . . water goes in freely and is retained longer so that my crops don't waterlog or suffer as much during droughty periods. Medina is a very important part of my farming program."

IN NEBRASKA, Rudy Griess, of Aurora, used Medina on wheat and made a premium 20 bushels to the acre (42 bushels without, 62 bushels with). His crop also matured four days earlier. "When the Medina wheat was cut and harvested, the non-treated wheat (part of the same field) was still too green to cut," says Griess.

IN MISSOURI, David Lape, of Matthews, reports: "On my wheat I got 68 bushels per acre where I used Medina at planting—and only 50 bushels where I didn't use it."

IN KANSAS, Ernest Froetschner, of Kinsley, reported a yield of 91 bushels of dryland wheat per acre on acreage where Medina has been used since 1969. It may turn out to be a record yield for Kansas dryland wheat in 1976. Froetschner reported that the wheat stayed green all winter, didn't blow out, and had a tremendous root system. This wheat had as many as 24 stools per plant and the heads had 3-mesh grain.



IN NEW JERSEY, Jim Wright, manager of Delalio Sod Farms, Inc., of Cedarville, reports that Medina produced 22 tons of tomatoes per acre while the no-Medina acreage produced only 16 tons. (Note, in the photo above, the foreground area shows where no

Medina was applied.) The Medina grade was 100%, the check 95%; color scale on Medina tomatoes was 65, and 60 on the check. Yields ran lower than normal because of 13 inches of rain in one week.



IN TEXAS, F. S. Baldwin, of Flo-Lo Groves, is pictured with Medina-treated grapefruit . . . twenty #1-size in one cluster. Count those results!

in Fruits and Vegetables

For best results on vegetables — garden or commercial:

Apply 1 gallon of Medina or Medina II per acre ahead of planting. On crops that are transplanted use 5 to 6 tablespoons of Medina per gallon of water in garden or 1 gallon per acre rate in field crops. Make foliar applications of Medina II at 1 gallon rate commercially or sprayer hose for gardens, or 5 to 6 tablespoons per gallon in sprinkling cans. When crops are 3 to 4 weeks old,

repeat every 30 days except on lettuce and cabbage where no foliar application is recommended.

For trees . . . fruit, nut and shade:

Apply 1 gallon of Medina or Medina II per acre during the winter months, well ahead of spring bloom. After bloom, add 1 pint of Medina II to each fungicide or insecticide spraying for at least 4 sprayings.

Results that count... in Fruits and Vegetables

IN MISSOURI, Robert Nelson, of Morley, writes: "The first Medina I put out was on cantaloupes. I could see a difference in them about the time they started blooming. The Medina plants had a greener, healthier-looking vine.

"We never did harvest cantaloupes for as long as we did from those with Medina—at least 3-4 weeks longer. Best quality size and tastier.

"Our culls were very low."

IN CALIFORNIA AND TEXAS, O. P. Murphy, of Salinas and Houston, is an extensive grower and shipper of tomatoes for the fresh market. He first tried Medina in 1968, discovering he picked more tonnage, tomatoes matured faster and were solid (not mealy). And he believed they tasted better than non-Medina tomatoes. After his trial use of the product in 1968, he has used Medina on all of his acreage ever since. One season, he was one of the very few growers from the Salinas Valley of California to have early tomatoes to ship. An unseasonably early frost nipped most of the area's production. Murphy's crop was affected very little.

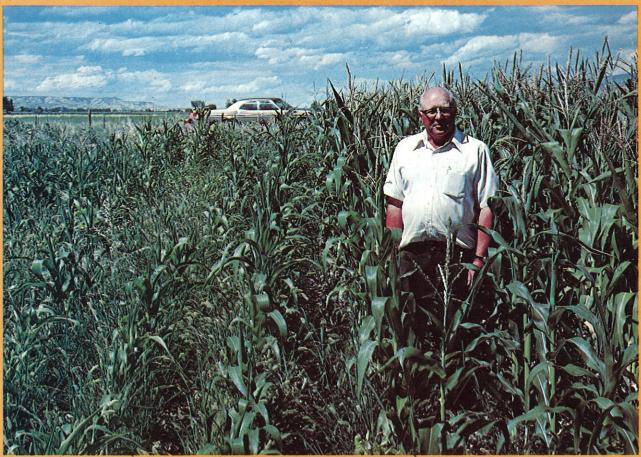
Vardaman, says: "I used Medina on every acre of my yams. There is quite a bit of difference . . . ground is loose with Medina . . . skins are tough . . . it's really paying off. I had yams here 4 times before . . . these are the best. Ground is just loose as it can be. Ordinarily as much rain as we had this year, the soil would have been really packed. We are harvesting 175 to 200 bushels per acre of #1s on these early potatoes. The color is really good and the skin is tough."

IN TEXAS, Mrs. Albert Meyer, of Beasley, says: "I had not been able to keep my strawberries over the summer even though they were well watered. For several years now I have watered the plants with Medina when I set them out. Now I have no trouble keeping the plants. The vines are profuse and the berries are much larger. Of course I use Medina on all my vegetables. I know it works."

IN TEXAS, at Stephen F. Austin State University, Dr. T. A. Alhashimi conducted tests on 10 different vegetables in 1975, using Medina. He reported Medina increased the overall yield of the vegetables by 75.8 percent. Medina was applied to the soil at the rate of 1 gallon per acre prior to planting.

Individual increases for the vegetables

were:
Beef Steak Tomatoes182%
Cucumbers104%
Zucchini Squash95%
Okra91%
Crookneck Squash64%
Rutgers Tomatoes55%
Butter Beans—Medium52%
Butter Beans—Large47%
Bell Peppers47%
Marglobe Tomatoes21%



No Medina here.

1 gallon of Medina per acre here.

on Problem Soils

IS ALKALI SOIL YOUR PROBLEM?

IN WYOMING, Virgil Zwemer, of Frannie, had troubles with it, until he used Medina. Says Zwemer, referring to the scene above, "This field was non-productive until this year when I applied a gallon of Medina per acre on all but a few rows. You can see it would have been non-productive again except where I applied the Medina. More than 10 tons of ensilage was harvested per acre where the Medina was used, nothing was harvested on the check, there was barely enough for the pheasants!"

Light problems like these respond well with only 1 application of Medina. Severe problems will take longer and more applications but such problem soils can be brought back into production economically. The longer you use Medina the greater your results will be. Why not let Medina help you put problem soils back to work again.

For best results on Alkali and Salts:

- Apply 1 gallon of Medina or Medina II and disc in lightly. The field may then be planted in the normal manner.
- Where severe alkali salts exist, apply another gallon of Medina or Medina II 45 to 60 days after the first application.
- Repeat annually until problem is under control. Then use 1 gallon per acre as a maintenance program.

Results that count... on Problem Soils

IN LOUISIANA, Melvin Baker, of Gueydon, contended for years with four to six-inch hard clods in some of his rice acreage. Rice residues were stubborn to decay. He applied Medina and six weeks later reported, "The soil has become mellow, easy to work and clods just melt down. Rice crop residues are nearly all decomposed even though Medina was applied only six weeks before."

IN OKLAHOMA, Bob Curtis, of Minco, a dryland alfalfa grower, had 30 lower acres of a field that would not produce alfalfa due to high alkali content. He applied one gallon of Medina to the stubborn 30 acres, then seeded alfalfa. He attained a near-perfect stand in ground so troubled that it wouldn't even sprout milo seed. His first year production was 300 pounds of alfalfa seed and 3½ tons of hay. "By bringing this 30 acres back into production, it has increased production from the overall field by at least 50 percent," says Curtis.

IN NEBRASKA, Rudolph Griess, of Aurora, says: "Before Medina treatment, when it would rain we would have ponds in all the low spots. After using Medina we had a five-inch rain with no run-off. It all soaked in. Then it turned dry before the second cutting. The Medina-treated field came right back with regrowth, while the untreated crop turned brown and had no regrowth. We made four cuttings where we used Medina and only two cuttings where we didn't use Medina."

IN TEXAS, The Van Damme Farms, of Devine and Hondo, report a substantial increase in cucumbers, peppers and corn by using Medina. The alkali areas in the fields have been changed to mellow soils where small seed will germinate and crusting is no problem. The Medina-treated soil is mellow and will plow one gear faster than the untreated field.

IN NEBRASKA, Erwin Mitchell, Paddock Siding Farm Store, at Central City, said: "We put out fifteen 20-acre demonstration fields with our consulting agronomist in 1974. Every farmer got results from Medina. I will be mixing Medina with as much fertilizer as I can for my customers in 1975.

"Farmers with high sodium soils were very interested in the effects of Medina. We got crops from soils that never produced before. On one field our soil test showed a 24% reduction in sodium with just one application of Medina, at a gallon to the acre rate."

Results that count... with Medina II



MEDINA II WORKS AS A FOLIAR SPRAY. Rayburn and Marion Coggins, Tupelo, Mississippi, tested Medina II and Medina in 1976. Medina II was applied just prior to bloom at the 1 gallon per acre rate. Even though the beans were drought-stressed, Medina II increased the growth as shown above by Rayburn, and his son, John Rayburn, says: "The leaves were yellow from drought but the color came back after we sprayed Medina II. These beans grew 6 to 8

inches taller where we used the Medina II.

"Medina was sprayed on the soil before planting with a herbicide on nearly all of our 1100 acres. We left some test strips. The regular Medina increased our yields on early beans by 8.3 bushels per acre. I believe the difference on the later beans will be much greater. These are the best soybeans we have ever grown and we will not plant another soybean without using Medina."



MEDINA II WORKS AS A SEED TREATMENT Frank Rowley Jr., Valley Center, Kansas, used Medina II to treat the seed on all of his corn except six rows. The treated seed came up faster and grew more vigorously. A freeze hit the corn when it was about 6 inches tall. The corn on the 6 rows which were not treated burned back to

the ground and much of it died. The Medina II corn suffered very little, only the tips of the leaves were burned. As you can see in the photo above the seed treatment produced a significant difference in the growth and stand of the corn. At harvest time the treated corn was 4% dryer.

Results that count... Other Crops

ON CANE, IN LOUISIANA, Otis Bernard, of Broussard, tested Medina in 1973 and averaged 5 tons per acre more with Medina. He used Medina on all his cane in 1974 and the report was: "It was the prettiest cane in the area. Summer drought hurt the no-Medina cane in the area. The dry weather had much less effect on the Medina cane."

ON PEANUTS, IN OKLAHOMA, Ray Oglesby, of Eakly, used Medina on his peanuts—10 acres were left untreated and used as a check plot; 10 acres received one-half gallon at planting time; 20 acres received one-half gallon at planting and one-half gallon (directly on the foliage), in mid-July. Results (green weight):

Untreated, 4,220 lbs. per acre.

One-half gallon Medina per acre, 4,500 lbs. per acre.

One gallon Medina per acre, 5,280 lbs. per acre—an increase of 1,060 lbs. over the untreated check plot.

ON COASTAL BERMUDA, IN TEXAS, Franklin Casper, of Poth, has been a commercial coastal hay producer for many years. He has one meadow next to his house that received 400 pounds of a balanced fertilizer, just before it began to green up. But, when he cut the crop it made only 24 bales to the acre. When he realized fertilizer alone wasn't going to pay off, he sprayed on one gallon of Medina to the acre and came back with 585 pounds of ammonium-sulfate. In just a matter of a few days he noticed changes. And four weeks after he cut his first 24-bale-tothe-acre crop, he cut again. This time he made 83 bales of coastal hay to the acre-a 59-bale increase. In five successive cuttings, each cutting made over 80 bales to the acre. He gives Medina credit for loosening the soil to enhance water intake and for making his fertilizer work more efficiently.

ON RICE, IN ARKANSAS, John Cruthis, of Brinkley, had farmed the same land for over 20 years, where salt buildup had become an everincreasing problem. He would plant rice and it would come up to a perfect stand, but when he put the first water on, the rice started dying. Production was consistently mediocre (75 to 80 bushels). As much as 10 acres in every field wouldn't be worth cutting. In 1969 he tested Medina on a few acres and liked what he saw. He used it on all of his acreage in 1970: "I am cutting well over 120 bushels per acre and cutting more than 50 bushels an acre on these spots (worst salt build-up spots) where I never had any rice to cut before." His investment had been less than one gallon per acre, although he had pushed his yield from 80 to 120 bushels-about 11 barrels more per acre.



Spring-applied Atrazine banded on the previous crop. No Medina was used. Damage occurred the following spring to oats.



Same field as above but with 1 gallon Medina sprayed on and disced after fall harvest. Medina was mixed with fertilizer, spring-applied, only minute damage occurred.



Carry-over Atrazine plus 3 pounds of Atrazine broadcast at oat-planting time in the small area. All of the field had 1 gallon Medina with liquid fertilizer. Medina neutralized the old Atrazine and a normal crop of oats was produced.

in Herbicide Action

MEDINA REDUCES CHEMICAL CARRY-OVER.

At the end of the growing season there may be herbicide residues that prevent the rotation of other crops, (i.e. wheat, oats, corn and milo). Where this is a problem apply 1 gallon of Medina immediately after harvest on the crop where the herbicide was used. Disc in; if moisture is present, most of the herbicide residue will be gone in about 3 weeks and there should be better than an 80% chance of normal or better-than-normal crop following the application of Medina.

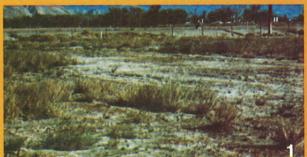
Results that count... in Herbicide Action



IN TEXAS, Bob Thuett, of Hereford, reports a similar result when they ran a 3-way test. With just Atrazine and water there was only about 50% control. With Atrazine and liquid nitrogen the control was much better. But when Atrazine, nitrogen and Medina were mixed together, the control was again near 100%. There was so much difference the farmer asked him if he was sure that Atrazine had been sprayed on the part of the field where just water had been added to the Atrazine.

IN MISSOURI, James Hedges, of Matthews, applied his pre-plant cotton herbicide, planted cotton only to have cold weather kill off his stand. Being too late to replant, he disced and drilled soybeans knowing that the cotton herbicide would adversely affect his beans. He was encouraged to apply Medina to help reduce the damage. He was not sure of its effectiveness and didn't want to spend the extra money, but did apply it to 10 acres. The area where Medina was applied showed no damage from the herbicide, the rest of the field was severely damaged. Observations before harvest show that the yield where Medina was applied will be at least onethird more and very likely twice as much as where the Medina was not applied.

IN KANSAS, Howard Schmidt, of Montezuma, mixed crop oil and Atrazine with Medina. He reports: "Where I did not add Medina I only had about 50% weed control. But, where I mixed in Medina the control was 95 to 100%. Later I could tell exactly to the row where the Medina had been applied on the corn."







on Alkali and Salts

- 1. For more than 25 years no crops grew here.
- 2. One gallon per acre of Medina was applied, then the ground was seeded to oats and alfalfa.
- 3. After the 2nd gallon per acre of Medina, the alkali problem is greatly diminished and alfalfa is now being produced.

A problem soil like this will take more applications of Medina to keep it productive. The treatment is highly economical. Medina responds more quickly to soils with less problems than these. Use Medina on **all crops** for greater yields and better quality. Medina is distributed by:

Medina[®]

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