



Peach Farmer's Association, Yangshan, Wuxi, China, Nov. 2004



Agricultural use of environmental-friendly ingredients is a growing international trend. AZOMITE® is a multi-mineral fertilizer that is OMRI-listed for certified organic production. An experiment was conducted to test AZOMITE®'s practical application on Peach crops from YangShan District of WuXi City, Jiangsu Province, China. The well-known Peach from this area supplies major markets such as Shanghai, Nanjing, and HangZhou. There are over 100,000 Mu (6600 hec) of peach farms in the area, with an annual production of over 100,000 tons of peaches between May and August. The objective of the test included the effect of AZOMITE® on peach trees under stress due to age or depleted soil nutrients.

2 Material and Methods

2.1 AZOMITE® was provided by distributor Shanghai Lytone Biochemicals, Ltd. Typical assays reveal over seventy elements. Potassium sulfate was purchased from commercial sources.

2.2 Experiment Design: A total of 12 lots were selected at random to divide into 3 different groups. Each group will have 3 lots as replicates with 0.5 Mu (333 M2) each lot. The three groups are:

- A. 3KG AZOMITE® spread around the root crown of each Peach Tree. Approximately 150KG were used for each Mu.(Ave. 50 trees/Mu). Additionally, 5KG organic fertilizers were used per tree;
- B. 3KG of a commercial chemical fertilizer was used instead of AZOMITE®. 5KG organic fertilizer was also used;
- C. Only 5KG organic fertilizer was used for each tree

2.3 Location: All of the lots were located in Yangshan Village, Yangshan Township.

2.4 Plants: All of the Peach trees were locally grown since late 1970s. There was some seedling improvement effort. However, the farmers seemed to rely solely on the government extension station's help in strain improvement.





////////////////////////////////////

2.5 Land: The fertilizer strength of the soil in question were of average, with a rather flat layout. There were no significant differences in soil condition between the groups.

2.6 Season: The fertilizers were all applied on Nov. 15, 2003 according to plan, and covered lightly with soil. There was no significant weather condition that could have impacted the results of the trial. Farm management practices were identical.

3. Results:

3.1 Total yield among the plots using different fertilizers:

Treatment Group	Ave. Production per lot (KG)	Ave. Production per Mu (KG)	Improvement over control (+%)
A	510	1020	27.50%
B	485	970	21.25%
C	400	800	

Based on the above are averages taken from all of the trees in the same group, it appears that AZOMITE® was able to improve yield of peach at a higher rate than the other treatments, and significantly better than the control group.

3.2 Effect of AZOMITE® on Brix level in the Peach; Value taken from 10 peaches harvest at random from each group.

Treatment Group	A	B	C
1	14.5	14.6	13.1
2	16	15.55	14.5
3	16.55	12.2	12.8
4	14.5	13.5	13.8
5	15.25	14.8	14.8
6	16.5	15.1	12.3

////////////////////////////////////



Treatment Group	A	B	C
7 (con't)	16.6	14.25	12.5
8	15.6	11.35	12.5
9	15.45	14.5	13.25
10	15.3	15.7	14.4
Average Brix	15.625	14.155	13.4
Improvement over control (+%)	16.60%	5.60%	

The Brix level of the AZOMITE® group was significantly higher than those of the others, with seemingly smoother pulp and stronger flavor. Observation by farmers and investigators noted that the AZOMITE® group blossomed earlier than the other groups by 3-4 days. The leaves are of a dark green color as compared to the lighter green color of the other groups. The pest pressure seems lighter and there were more buds with successful ripening than the other groups.

4. Summary:

4.1 AZOMITE® seems to be able to support earlier budding, increased the chlorophyll content of leaves, thus improving the photosynthetic efficiency of plants. There are reports that AZOMITE® may also help the absorption of other nutrients by plant when applied together. This experiment seems to confirm such an observation.

4.2 Application of AZOMITE® at 150KG per Mu (2,250kg/hect) was able to help improve overall yield of peaches by more than 25% under the conditions tested in this experiment.

Conclusion:

AZOMITE® was able to stimulate growth of peach tree saplings significantly

Appendix:

(continued on following page)



////////////////////////////////////

Appendix:

Effect of peach tree saplings in Yangshan by AZOMITE® (2~3 yrs old).

Index taken at different periods of the experiment.

2004/4/20

Treatment	Length (cm)						
AZOMITE®	Circumference	Tree Crown	Height	New branch on the main stem	Side Branch 1	Side Branch 2	Side Branch 3
	245	2400	2750	520 710 350	220 170 150	160 110 90	170 90 80
CK	215	2300	2150	320 350 410	90 110 70	40 40 30	10 8 16

2004/5/21

Treatment	Length (cm)						
AZOMITE®	Circumference	Tree Crown	Height	New branch on the main stem	Side Branch 1	Side Branch 2	Side Branch 3
	250	2500	2900	990 1100 950	700 400 420	700 400 350	800 370 300
CK	220	2330	2200	700 740 900	220 260 170	300 230 190	190 160 300

2004/11/3

Treatment	Length (cm)					
AZOMITE®	Circumference	Tree Crown	Height	New branch on the main stem	Side branch 1	Side branch 2
	310	3300	3100	1600	1000	
CK	270	2900	1300	1250	700	

////////////////////////////////////