Subject: Proposed PicoAg 25B To Replace Viriciudes product for testing in house to evaluate

A virucide is an agent (physical or chemical) that deactivates or destroys viruses.

PicoAG of future products must have these characteristics
1). No Harm for Air (no GWC, ODC, VOHAP or VOC), Soils or Waters
2). Cannot be made of Organic Chemistry, Graphene or Nanotechnology, Just Picotechnology or Physical Chemistry
3). Goals are primary Distribution is as a OTC product.
4). Must be made of Atomic Elements and Not Molecules.
5). Must be able to kill all pests, Be it Bacteria, Fungi, Virus and Insects.
6). Must be able to Deep Clean and Grow Skin
7). Must be able to Penetrate the Shields of all pests.
8). Must be approved at the State and or Federal FDA or better be Exempt
9). Must be safe for Humans, Birds and Animals - Zero Side Effects
10) Must have no heavy metals elements

Soysoap Kills Viruses by the elimination strands of nucleic acid, either DNA or RNA, and protective protein coat (the capsid), Or a lipid envelope, surrounding the protein.

Soysoap has been injected into banana plants at a rate 5 ml 256 to 1 of Soysoap dissolved in 10 ml of water) and have documented the eradication of **CMV (Cucumber Mosaic Virus)** in bananas, Moko, and Erwinia.

Soysoap was applied 256 to 1 in conjunction with existing fertigation on Japanese Plum in a farm in Murcia, Spain known to have struggled against **Sharka-Plum Pox Virus** (PPV) to assess impact on growth and yield. Results: Infected rate (wastage) on treated plots is less than 4% whilst untreated plots is more than 30%.

Soysoap was applied in conjunction with existing fertigation protocol in a zucchini farm in Spain during a season with onset of **Tomato Leaf Curl New Delhi Virus (TolCNDV)** which ravaged melon crops across Spain. Results: Treated infected trees showed regeneration of leaves with new shoots and fruiting with no visible signs of the disease. Achieved normal growth and yield despite onset of the virus.

(first two sampling dates), the third leaf of the main stem of each plant (second two sampling dates), or the third leaf of two stems of each plant. The numbers of eggs, crawlers and sessile nymphs (2nd, 3rd and 4th instars) were counted weekly on the terminal leaflet from the 7th - 8th leaf counting from the top of each plant. On 22 June all fruit of marketable size (> 2.25 inches in diam) were harvested from the middle 10 plants of the middle row of spray treatments that had been applied weekly. Fruit with zippering, cat-facing, blossom end rot or blotchy ripening (due primarily to high temperatures) were culled as defective and counted. The remaining fruit were graded for size by machine where extra large fruit were > 2.75 inches in diam, larger were 2.51 to 2.75 inches in diam and medium were 2.26 to 2.5 inches in diam. All size categories were counted and weighed.

The silverleaf whitefly population was low early in the season but increased to a moderate level by June. Significant differences in the numbers of eggs relative to the check were detected on three sampling dates (Table 2). On 7 Jun, fewer eggs were observed on foliage of all treated plots compared to the check. The number of crawlers differed from the check on seven sampling dates, three of which were during June (Table 3). Plots treated with Oberon had fewer crawlers on all three days while plots treated with the Courier/Knack rotation had fewer on two dates and plots treated with Diamond had fewer on one date. On all sampling dates in June, the numbers of nymphs on foliage in plots treated with Oberon were significantly lower than that on foliage in check plots (Table 4). Nymphal counts on plots sprayed with the Courier/Knack rotation or Diamond were significantly lower than those of non-treated plots on 21 and 28 June. Adult densities were low on all plots during the trial, and fewer were detected on some treated plots on three sampling dates (Table 5). The percentage of plants with symptoms of TYLCV was not

TOMATO: *Lycopersicon esculentum* Miller 'Sebring'

SOIL AND FOLIAR INSECTICIDE APPLICATIONS FOR MANAGEMENT OF THE SILVERLEAF WHITEFLY ON FRESH MARKET TOMATOES, SPRING 2004

Silverleaf whitefly: *Bemisia argentifolii* Bellows & Perring

On 22 Mar, transplants were set 18 inches apart on raised beds of EauGallie fine sand soil covered with black low density polyethylene mulch. Plots were three, 21 ft long rows on 12 ft aisles and 5 ft centers and were irrigated by a seepage sub-irrigation system. Treatments were replicated four times in a randomized complete block design. Admire was applied on 23 Mar to each plant in 4 oz of water. The remaining products were applied either weekly or at the pre-determined density of five whitefly sessile nymphs and/or pupae/10 leaflets (Table 1). Foliar applications were made with a high clearance, self-propelled sprayer operated at 200 psi and 3.4 mph. It was fitted with eight Albuz orange nozzles per row and delivered 60 (4 nozzles open), 90 (six nozzles open) or 120 (eight nozzles open) gpa. Because of a heavy population of southern armyworm larvae, foliar applications of Dipel DF (2 lb/acre) and XenTari (2 lb/acre) were alternated weekly and were supplemented with an application of Avaunt 30WG (3.5 oz/acre) on 20 Nov. The number of plants in each plot with definite symptoms of whitefly-vectored geminivirus, primarily tomato yellow leaf curl virus (TYLCV), were recorded weekly. Whitefly densities were assessed on the middle 10 plants of the middle row of each plot. The number of adults were counted weekly by carefully turning all of the leaves of the whole plant

I spent about an hour on viruses and looked into my 15 year data base and found this work we did around the world. I have a high confidence that we have a very good viricide. We did this work accidental in 2004 to 2007.
Donald Wilshe, Biobased USA, 805 Cottage Hill Way, Brandon, Fl 33511, 3363060193 Whatsapp

Observed Benefits	Location	Crop Type
Better resistance to stresses and diseases. Overcame onset of Sharka-Plm Pox Virus (PPV) to reduce infected rate from 30% to less than 4%.	Murcia, Spain	Japanese Plum
Better resistance to stresses and diseases. Overcame onset of Tomato Leaf Curl New Delhi Virus (TolCNDV) to reduce infected rate and delivered normal yield.	Almeria, Spain	Zucchini
Enhanced resistance to stress and diseases, and resisted onset of Papaya Ring Spot Virus. Crop recovered with regular output.	Supanburi, Thailand	Papaya

Field Observations	Location	Crop Type	Remarks
Papaya plantation applied Nutragreen™ solution to combat Papaya Ring Spot Virus. Crop recovered against PRSV.	*Thailand*	*Papaya*	*Replaced use of banned & toxic Formaldyhide*

Thailand Fruit Trail: Papaya Ring Spot Virus (Potyviridae PSRV-P)

Before Soysoap

1. Papaya ring spot virus (PRSV-P) destroys the shoot, leaves and fruit. Growth inhibited.
2. The leaves are blighted.
3. Black spot shown on the fruits.
4. With onset of PRSV-P, growth of the shoot,leaves and flowers will be stunted.
5. Trees will eventually die off.

Conclusions:

1. Soysoap as cured Papaya from infection of Papaya Ring Spot Virus (PSRV-P).
2. New shoots and leaves have grown healthily.
3. Black spots on fruit have disappeared after the third application of Soysoap After 2 foliar sprays and 1 soil drenching
4. Produce new shoots and leaves (with PRSV-P no new leaves can be produced and the shoot will dry and die off).
5. The new shoots and leaves have healthily grown without any PRSV-P infection. No black spots on the fruit. No blighted leaves.

Note 1) Soysoap also handled Silver leaf White-flies and **Tomato Yellow Leaf Curl Virus (TYLCV)** !
Note 2: The reason we can kill the virus is its about 200 nanometers and my atom is only 400 pm

lower on treated plots compared to the check on any sampling date (Table 6). No weekly treatment resulted in more medium or large marketable tomatoes compared to the check or the Admire/Courier/Knack standard (Table 7). The weekly spray of PRE-VAM and Endosulfan resulted in significantly more extra large tomatoes compared to the check; however, this treatment also resulted in more fruit culled due to blotchy ripening. No visible phytotoxicity was observed. This research was supported in part by the Florida Agricultural Experiment Station, and is approved as Journal Series No. ____.

Biobased USA recomends your favorite viruses you want to get rid of as we have tested well.
Virus Arenavirus Virus,
Virus Banana mild mosaic
Virus Banana virus,
Virus Bean Pod Mottle Virus
Virus Chlamydia pneumoiae Virus
Virus Coronavirus Virus
Virus Coxsackievirus Virus
Virus Echovirus Virus
Virus Hantavirus Virus
Virus Influenza Virus
Virus Morbillvirus Virus
Virus Mosaic Cucumber mosaic virus
Virus Parainfluenza Virus
Virus Paramyxovirus Virus
Virus Parvovirus B19 Virus
Virus Poxvirus - Vaccinia Virus
Virus Rhinorvirus Virus
Virus Soybean Mosaic Virus
Virus Streak Banana streak virus
Virus Togavirus Virus
Virus Varicella-zoster Virus
Virus Yersinia pestis Virus

Note: *Dr. Dave Schuster.* the lead person at University of Florida for tomato protection testing. Would not send to Bayer results of Soysoap attached. Dr. Schuster, UF 2004 was Bayer Admire product tester. If Bayer would of seen Soysoap product results there would have been problems. Notice he didn't even mention Soysoap in the Abstract. So much for honest testing.

Table 1

Treatment/Formulation*	Rate (Amount/acre)	Soil Application	Date of Application											
		23 Mar	1 Apr	2 Apr	8 Apr	15 Apr	22 Apr	29 Apr	6 May	13 May	20 May	27 May	3 Jun	10 Jun
Admire 2F	16.0 oz	X												
then Courier 70W	0.5 lb										X			
then Knack 0.86EC	8.0 oz												X	
Admire 2F	16.0 oz	X												
then Diamond 0.83EC	14.0 oz										X		X	
Admire 2F	16.0 oz	X												
then Oberon 240SC	8.5 oz													
+ Induce	0.05%										X		X	
Admire 2F	16.0 oz	X												
then Endosulfan 3EC	0.67 qt		X			X			X		X		X	
Admire 2F	16.0 oz	X												
then PRE-VAM	0.4% v/v		X		X	X	X	X	X	X	X	X	X	X
Admire 2F	16.0 oz	X												
then PRE-VAM	0.4% v/v		X		X	X	X	X	X	X	X	X	X	X
+ Endosulfan 3EC	0.67 qt		X			X			X		X		X	
SoySoap	0.5% v/v		X		X	X	X	X	X	X	X	X	X	X
Encapsulated Ginger Oil														
+ Cottonseed Oil	0.5% v/v			X	X	X	X	X	X	X	X	X	X	X
Satisfy	6.0 oz		X		X	X	X	X	X	X	X	X	X	X
Satisfy	3.0 oz		X		X	X	X	X	X	X	X	X	X	X
Ultrafine Oil	0.5% v/v			X	X	X	X	X	X	X	X	X	X	X
Check	----													

*A "+" indicates that products were combined.

Table 2

Treatment/Formulation*	Rate (Amount/acre)	No. silverleaf whitefly eggs/10 leaflets											
		14 Apr	19 Apr	26 Apr	3 May	10 May	17 May	24 May	1 Jun	7 Jun	15 Jun	21 Jun	28 Jun
Admire 2F	16.0 oz												
then Courier 70W	0.5 lb												
then Knack 0.86EC	8.0 oz	<1	6	9	4	2	7	6	5	2	28	9	3
Admire 2F	16.0 oz												
then Diamond 0.83EC	14.0 oz	1	3	4	3	5	6	7	6	4	24	4	2
Admire 2F	16.0 oz												
then Oberon 240SC	8.5 oz												
+ Induce	0.05%	0	2	4	1	3	8	3	2	4	5	4	14
Admire 2F	16.0 oz												
then Endosulfan 3EC	0.67 qt	0	1	7	3	1	4	5	3	5	85	----	----
Admire 2F	16.0 oz												
then PRE-VAM	0.4% v/v	1	6	4	2	20	12	7	17	2	32	----	----
Admire 2F	16.0 oz												
then PRE-VAM	0.4% v/v												
+ Endosulfan 3EC	0.67 qt	1	0	1	2	1	11	3	6	4	38	----	----
SoySoap	0.5% v/v	8	4	4	3	2	7	14	20	1	46	----	----
Encapsulated Ginger Oil													
+ Cottonseed Oil	0.5% v/v	1	2	3	4	3	9	6	12	5	64	----	----
Satisfy	6.0 oz	2	10	3	<1	4	4	8	14	5	20	----	----
Satisfy	3.0 oz	<1	3	3	4	6	4	13	13	2	25	----	----
Ultrafine Oil	0.5% v/v	2	<1	1	8	3	4	10	23	6	63	----	----
Check	----	8	8	4	12	4	8	9	10	19	44	5	1
LSD (P=0.05)	----	8	7	6	9	8	9	9	14	9	55	6	13

*A "+" indicates that products were combined

Table 3

Treatment/Formulation*	Rate (Amount/acre)	No. silverleaf whitefly crawlers/10 leaflets											
		14 Apr	19 Apr	26 Apr	3 May	10 May	17 May	24 May	1 Jun	7 Jun	15 Jun	21 Jun	28 Jun
Admire 2F	16.0 oz												
then Courier 70W	0.5 lb												
then Knack 0.86EC	8.0 oz	1	4	3	9	1	17	9	23	14	3	8	6
Admire 2F	16.0 oz												
then Diamond 0.83EC	14.0 oz	<1	1	4	9	5	22	14	35	15	34	22	10
Admire 2F	16.0 oz												
then Oberon 240SC	8.5 oz												
+ Induce	0.05%	<1	3	3	2	1	16	4	11	10	8	8	28
Admire 2F	16.0 oz												
then Endosulfan 3EC	0.67 qt	0	1	4	3	2	14	9	11	24	67	----	----
Admire 2F	16.0 oz												
then PRE-VAM	0.4% v/v	<1	4	8	11	5	18	12	26	27	53	----	----
Admire 2F	16.0 oz												
then PRE-VAM	0.4% v/v												
+ Endosulfan 3EC	0.67 qt	0	2	1	2	5	5	4	27	18	33	----	----
SoySoap	0.5% v/v	3	6	4	7	4	16	7	40	18	76	----	----
Encapsulated Ginger Oil													
+ Cottonseed Oil	0.5% v/v	2	3	7	6	2	10	8	26	38	119	----	----
Satisfy	6.0 oz	2	7	9	10	7	10	10	33	30	20	----	----
Satisfy	3.0 oz	0	2	9	17	3	13	10	49	20	58	----	----
Ultrafine Oil	0.5% v/v	<1	2	4	5	3	17	15	38	35	179	----	----
Check	----	4	4	10	9	5	20	6	34	64	74	44	15
LSD (P=0.05)	----	2	8	7	9	4	14	11	22	22	102	21	15

*A "+" indicates that products were combined.

Table 4

Treatment/Formulation*	Rate (Amount/acre)	No. silverleaf whitefly sessile nymphs/10 leaflets											
		14 Apr	19 Apr	26 Apr	3 May	10 May	17 May	24 May	1 Jun	7 Jun	15 Jun	21 Jun	28 Jun
Admire 2F	16.0 oz												
then Courier 70W	0.5 lb												
then Knack 0.86EC	8.0 oz	0	0	<1	3	1	9	5	16	30	54	32	15
Admire 2F	16.0 oz												
then Diamond 0.83EC	14.0 oz	<1	0	0	1	0	6	11	25	26	43	21	13
Admire 2F	16.0 oz												
then Oberon 240SC	8.5 oz												
+ Induce	0.05%	0	0	2	1	1	6	3	8	13	9	9	21
Admire 2F	16.0 oz												
then Endosulfan 3EC	0.67 qt	0	0	<1	0	1	4	5	16	26	78	----	----
Admire 2F	16.0 oz												
then PRE-VAM	0.4% v/v	<1	0	3	2	3	3	5	26	38	68	----	----
Admire 2F	16.0 oz												
then PRE-VAM	0.4% v/v												
+ Endosulfan 3EC	0.67 qt	0	0	0	1	3	2	5	20	32	42	----	----
SoySoap	0.5% v/v	0	<1	3	3	11	5	7	28	45	93	----	----
Encapsulated Ginger Oil													
+ Cottonseed Oil	0.5% v/v	<1	<1	1	3	0	8	6	19	70	133	----	----
Satisfy	6.0 oz	0	2	2	3	5	5	7	21	54	80	----	----
Satisfy	3.0 oz	0	0	<1	4	2	12	5	34	45	93	----	----
Ultrafine Oil	0.5% v/v	0	<1	1	2	2	9	9	40	38	195	----	----
Check	----	<1	1	1	3	9	10	9	31	52	108	72	62
LSD (P=0.05)	----	1	1	4	3	8	8	8	20	30	73	19	21

*A "+" indicates that products were combined.

Table 5

Treatment/Formulation*	Rate (Amount/acre)	No. silverleaf whitefly adults/10 plants		No. silverleaf whitefly adults/10 leaves		No. silverleaf whitefly adults/20 leaves									
		30 Mar	6 Apr	12 Apr	19 Apr	26 Apr	3 May	10 May	17 May	24 May	1 Jun	7 Jun	15 Jun	21 Jun	28 Jun
Admire 2F	16.0 oz														
then Courier 70W	0.5 lb														
then Knack 0.86EC	8.0 oz	0	3	<1	1	1	<1	1	2	2	1	2	2	1	1
Admire 2F	16.0 oz														
then Diamond 0.83EC	14.0 oz	1	1	<1	<1	1	2	1	3	2	2	2	2	1	2
Admire 2F	16.0 oz														
then Oberon 240SC	8.5 oz														
+ Induce	0.05%	1	3	0	1	1	0	2	1	2	1	1	2	1	1
Admire 2F	16.0 oz														
then Endosulfan 3EC	0.67 qt	1	1	1	1	<1	<1	0	1	1	1	<1	3	---	---
Admire 2F	16.0 oz														
then PRE-VAM	0.4% v/v	1	1	0	2	1	2	1	1	2	1	1	1	---	---
Admire 2F	16.0 oz														
then PRE-VAM	0.4% v/v														
+ Endosulfan 3EC	0.67 qt	1	1	1	1	2	0	0	1	3	1	2	3	---	---
SoySoap	0.5% v/v	2	4	1	1	1	<1	<1	2	1	1	2	4	---	---
Encapsulated Ginger Oil															
+ Cottonseed Oil	0.5% v/v	1	1	1	<1	1	2	<1	2	1	1	2	2	---	---
Satisfy	6.0 oz	1	3	1	1	<1	1	<1	2	<1	1	3	1	---	---
Satisfy	3.0 oz	1	3	<1	2	1	<1	1	1	2	2	2	2	---	---
Ultrafine Oil	0.5% v/v	1	1	0	1	<1	<1	<1	0	1	3	2	6	---	---
Check	----	1	3	1	2	1	<1	1	1	1	2	1	5	2	<1
LSD (P=0.05)	----	1	2	1	1	1	1	1	2	2	2	2	3	2	2

*A "+" indicates that products were combined.

Table 6

Treatment/Formulation*	Rate (Amount/acre)	% of plants with symptoms of TYLCV										
		31 Mar	7 Apr	14 Apr	21 Apr	28 Apr	5 May	12 May	19 May	29 May	4 Jun	Average
Admire 2F	16.0 oz											
then Courier 70W	0.5 lb											
then Knack 0.86EC	8.0 oz	0.0	0.0	0.0	0.6	3.0	8.5	11.5	20.0	28.5	52.3	12.4
Admire 2F	16.0 oz											
then Diamond 0.83EC	14.0 oz	0.0	0.0	0.0	0.6	2.4	4.2	10.7	14.9	23.8	50.6	10.7
Admire 2F	16.0 oz											
then Oberon 240SC	8.5 oz											
+ Induce	0.05%	0.0	0.0	0.0	0.0	1.2	2.4	4.2	7.1	11.3	33.3	6.0
Admire 2F	16.0 oz											
then Endosulfan 3EC	0.67 qt	0.0	0.0	0.0	0.6	0.6	3.0	5.4	9.0	16.9	32.2	6.8
Admire 2F	16.0 oz											
then PRE-VAM	0.4% v/v	0.0	0.0	0.0	0.0	0.6	3.8	7.4	14.2	21.5	41.0	8.8
Admire 2F	16.0 oz											
then PRE-VAM	0.4% v/v											
+ Endosulfan 3EC	0.67 qt	0.0	0.0	0.0	0.0	0.6	3.0	6.5	8.3	12.5	37.5	6.8
SoySoap	0.5% v/v	0.0	0.0	0.0	0.0	0.0	1.8	4.9	8.0	11.7	33.7	6.0
Encapsulated Ginger Oil												
+ Cottonseed Oil	0.5% v/v	0.0	0.0	0.0	0.0	0.6	3.6	9.6	16.3	24.7	52.9	10.8
Satisfy	6.0 oz	0.0	0.0	0.6	0.6	6.0	10.8	23.4	36.0	55.2	85.7	21.8
Satisfy	3.0 oz	0.0	0.0	0.0	0.0	1.2	5.4	11.3	15.5	29.2	61.9	12.4
Ultrafine Oil	0.5% v/v	0.0	0.0	0.0	0.0	0.6	1.2	3.0	7.8	12.5	46.3	7.1
Check	----	0.0	0.0	0.0	0.6	0.6	4.2	6.6	11.9	26.3	52.6	10.3
LSD (P=0.05)	----	0.0	3.4	3.5	3.6	4.7	6.5	9.8	12.9	18.3	23.3	7.0

*A "+" indicates that products were combined.

Table 7

		Medium tomatoes		Large tomatoes		Extra large tomatoes		No. of culls			
Treatment/Formulation*	Rate (Amount/acre)	No.	Wt. (Lbs)	No.	Wt. (Lbs)	No.	Wt. (Lbs)	Cat facing	Zippers	Blotchy ripening	Blossom end rot
Admire 2F	16.0 oz										
then Courier 70W	0.5 lb										
then Knack 0.86EC	8.0 oz	10	2.2	24	7.8	105	53.4	1	4	16	5
Admire 2F	16.0 oz										
then Endosulfan 3EC	0.67 qt	9	2.2	30	9.4	144	72.1	1	7	28	6
Admire 2F	16.0 oz										
then PRE-VAM	0.4% v/v	5	1.3	34	10.8	125	66.6	<1	7	27	5
Admire 2F	16.0 oz										
then PRE-VAM	0.4% v/v										
+ Endosulfan 3EC	0.67 qt	5	1.2	31	9.8	154	76.1	<1	7	41	4
SoySoap	0.5% v/v	7	1.7	18	6.0	135	72.0	<1	7	28	8
Encapsulated Ginger Oil											
+ Cottonseed Oil	0.5% v/v	7	1.7	30	10.1	135	66.3	1	3	28	7
Satisfy	6.0 oz	8	2.2	27	8.6	108	52.3	0	3	13	6
Satisfy	3.0 oz	13	3.2	36	12.0	124	60.4	1	5	23	9
Ultrafine Oil	0.5% v/v	7	1.7	27	8.5	116	56.7	1	4	23	10
Check	----	9	2.1	29	9.0	123	62.4	1	6	17	3
LSD (P=0.05)	----	8	1.9	13	4.2	30	16.9	1	3	13	5

*A "+" indicates that products were combined.