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

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

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"PicoAg 4n1 25B" is a biopesticide and Bacteria, Insects, Fungi, and Virus are controlled! Picotechnology is not taught in any college in the world, Why?

We don't see these buys as Pico competition for last 20 years, The biologicals buying spree by agchem companies large and small swept the industry almost as fast as the spread of weed resistance. Bayer's trendsetting purchase of AgraQuest for nearly $500 million to BASF's $1.02 billion acquisition of Becker Underwood to Monsanto's $300 million investment in Novozymes in their so-called BioAg Alliance.

The US Gov EPA exempts* "PicoAg 4n1 25B" *pesticide registration under its 25B regulations that consists of Zinc, Carbon and Nitrogen! This product also qualifies as a Biopesticide, Biostimulant, Biofertilizer and Biologicals!

As a biopesticide you need a multipurpose mode of action for each elimination of vital elements in Bacteria, Insects, Fungi, and Virus pests you want to control.

Bacteria: elimination of cell membrane and to puncture it and drain proteins and lipid, PH.

Fungi: elimination of the cellulose and chitin.

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

Insects: elimination or penetration and dissolve lipid cellular membranes, cells desiccation, cellular metabolism, dissolving cuticles, lubrication joints leading to paralysis, stripping the pests protective shields, exoskeleton structure, chitin and protein substances, hydrocarbon chains smothering.

"**PicoAg 4n1 25B**" immediately impacts the exoskeleton structure of the pest upon contact by disrupting the molecular structure of the chitin and other protein substances that protect the insect. This mechanism of action triggers the rapid and irreversible deterioration of the insect's spiracles and tracheal system, resulting in suffocation. "**PicoAg 4n1 25B**" kills insects with elimination of chitin is a polysaccharide, a carbohydrate that has a chain sugar molecules, Chitin is a structure like cellulose. In addition to being found in exoskeletons.

"**PicoAg 4n1 25B**" major benefit of this revolutionary method of insect control is the absence of undesirable side effects on human health and no harm to the ecosystem. Additionally, unlike standard insecticides in use today, no built-in resistance can be developed by the targeted insects, but rather on the respiratory apparatus."

Science suggests that "PicoAg 4n1 25B" can be mechanical in primary sequential steps:
The first step is a direct interaction between the surface and the pests outer membrane, causing the membrane to rupture and leak fluids, proteins and nutrients.

Lastly a few more ways "PicoAg 4n1 25B" electromechanical can affect pests

- There can be a second step related to the holes in the outer membrane, through which the pests lose vital nutrients, protein, water and components, causing a general weakening of the pests.
- Electromechanical in can affect pests by penetration and dissolve lipid cellular membranes.
- This causes cells desiccation to leak water, proteins and nutrients and collapse,
- By interfering with cellular metabolism during metamorphosis,
- By dissolving cuticles the lubrication in the insect’s joints leading to paralysis
- By stripping the pests protective shields (wax, biofilm, etc), rendering it defenseless against subsequent treatment
- The extracts impact the exoskeleton structure of pests upon contact by disrupting the molecular structure of the chitin and other protein substances that protect the insect,
- The extracts have the ability to penetrate complex hydrocarbon chains and disintegrate them,
- The extracts emulsify pests thus stopping their reproduction cycle.
- The change the environment for growth with PH from acidophiles and neutrophiles to alkaliphiles .

After punching holes, how does "PicoAg 4n1 25B" further damage the cell?
Now that the cells main defense has been breached, there is an unopposed stream of "**PicoAg 4n1 25B**" entering the pest cell. This puts several vital processes inside the cell in danger. "**PicoAg 4n1 25B**" literally overwhelms the inside of the cell and obstructs cell metabolism (i.e., the biochemical reactions needed for life). These reactions are accomplished. When "**PicoAg 4n1 25B**" binds to these enzymes, their activity grinds to a halt. Pests can no longer "breathe", "eat", "digest", “reproduce” or “exist”.

How can "PicoAg 4n1 25B" punch holes in a pests?
Every cell's outer membrane, including that of a single cell organism like a pests, is characterized by a stable electrical micro-current. This is often called "transmembrane potential", and is literally, a voltage difference between the inside and the outside of a cell. It is strongly suspected that when a pests comes in contact with a "**PicoAg 4n1 25B**" surface, a short circuiting of the current in the cell membrane can occur. This weakens the membrane and creates holes and leak water, proteins and nutrients.

How can "PicoAg 4n1 25B" effect be so fast, and affect such a wide range of pests?
The experiences observed explain the speed with which pests and other pests perish on "**PicoAg 4n1 25B**" surfaces by the multi-targeted effects. After membrane perforation, can inhibit any given enzyme that "stands in its way," and stop the cell from transporting or digesting nutrients, from repairing its damaged membrane, from breathing or multiplying. Harmless to Environment Air, Water, Soil, Humans, Birds and Animals. This 80 year old science has no side effects or harm on human, birds and animal health. These solutions do not harm mammal cells nor do they attack neurological systems of humans, birds and animals.

How Does "PicoAg 4n1 25B" Puncture And Leak From Membranes?

It is used on lyse cells to extract protein or organelles, or to permeabilize the membranes of living cells.

What is permeabilization of cells?
The organic product dissolve lipids from cell membranes making them permeable to antibodies. Because the organic solvents also coagulate proteins, they can be used to fix and permeabilize cells at the same time. Saponin interacts with membrane cholesterol, selectively removing it and leaving holes in the membrane. Permeabilization is a the process of making something, such as a membrane or cell wall, permeable. Lyse is a verb referring to the process of lysis, the death of a cell. Lysis (/ˈlaɪsɪs/ *LY-sis*; Greek λύσις *lýsis*, "a loosing" from λύειν *lýein*, "to unbind") refers to the breaking down of the membrane of a cell, often by viral, enzymic, or osmotic (that is, "lytic" /ˈlɪtɪk/ *LIT-ək*) mechanisms that compromise its integrity. A fluid containing the contents of lysed cells is called a *lysate*. In molecular biology, biochemistry, and cell biology laboratories, cell cultures may be subjected to lysis in the process of purifying their components, as in protein purification, DNA extraction, RNA extraction, or in purifying organelles.

Trophobiosis Cycle: Pests shun healthy plants. Pesticides weaken plants. Weakened plants open the door to pests and disease. Hence pesticides precipitate pest attack and disease susceptibility, and thus they induce a cycle of further pesticide use.

Here is a suggested list to petri test. I would start since we are killing pesticide and its your lab and not field testing that we use 1 oz per gallon of water. But also have Nova best Bactericides and a control. PicoAg 25B or I might start just calling everything OMNI! Its your private label choice as I plan at least 100 labels for you to sell with the same product but just different dilutions. So 1 oz, ¾ oz, ½ oz and 1/3 oz and ¼ oz. You can fine tune what dilutions work best for each bacteria. Again we are talking 1 formula and different dilution not 50 different formulations. Just give me the worst

Archaea constitute a domain of single-celled organisms. These microorganisms are prokaryotes, and have no cell nucleus. Archaea were initially classified as bacteria, receiving the name archaebacteria, but this classification is outmoded.

We have never tested an **Archaea** knowingly but have asked to kill them in the belly of Animals as they make methane in New Zealand..

Archeas

Acidianus

Acidilobus

Acidococcus

Aciduliprofundum

Aeropyrum

Archaeoglobus

Caldisphaera

Caldivirga

Caldococcus

Cenarchaeum

Desulfurococcus

Ferroglobus

Ferroplasma

Geogemma

Geoglobus

Haladaptatus

Halalkalicoccus

Haloalcalophilium

Haloarcula

Halobacterium

Halobaculum
Halobiforma
Halococcus
Haloferax
Halogeometricum
Halomicrobium
Halopiger
Haloplanus
Haloquadra
Halorhabdus
Halorubrum
Halosarcina
Halosimplex
Haloterrigena
Halovivax
Hyperthermus
Ignicoccus
Ignisphaera
Metallosphaera
Methanimicrococcus
Methanobacterium
Methanobrevibacter
Methanocalculus
Methanocaldococcus
Methanococcoides
Methanococcus
Methanocorpusculum
Methanoculleus
Methanofollis
Methanogenium

Methanohalobium
Methanohalophilus
Methanolacinia
Methanolobus
Methanomethylovorans
Methanomicrobium
Methanoplanus
Methanopyrus
Methanoregula
Methanosaeta
Methanosalsum
Methanosarcina
Methanosphaera
Methanospirillum
Methanothermobacter
Methanothermococcus
Methanothermus
Methanotorris
Natrialba
Natrinema
Natronobacterium
Natronococcus
Natronolimnobius
Natronomonas
Natronorubrum
Nitrosopumilus
Palaeococcus
Picrophilus
Pyrobaculum
Pyrococcus

Pyrodictium
Pyrolobus
Staphylothermus
Stetteria
Stygiolobus
Sulfolobus
Sulfophobococcus
Sulfurisphaera
Thermocladium
Thermococcus
Thermodiscus
Thermofilum
Thermoplasma
Thermoproteus
Thermosphaera
Vulcanisaeta