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International Journal of Family & Community Medicine

Research Article
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Unique technologies: saving lives to save souls

Abstract

There are public health challenges throughout the world. Developing new technologies to reduce the risk and assist in the prevention of infectious diseases is critical. In addition, providing spiritual help using the Gospel of Jesus while providing health technologies can also assist in both hope and salvation. Several technologies were tested. The ProVector® vector control technology was found to be effective in controlling mosquitoes in the laboratory, in the yard of a home, and in a simulated refugee camp. Adult mosquitoes die within a few days after ingesting ProVector Entobac, and when their bodies are placed in water the larvae die. The Bioagent Transport and Environmental System (BioTEMS) was used to provide a risk assessment of malaria should it be introduced into a community in Georgia. The DNAudioDNArt Atomic™ music algorithm was useful found to be useful in educating and assisting communities and individuals facing different health challenges, including malaria, cancers, drug addiction, and the mental challenge from the loss of loved ones. A new song and colors based on fetal development was developed to assist the education of pregnant mothers and communities, that at the moment of conception the child begins to develop. In addition to reducing health challenges, the vector control, music, and art technologies include the Gospel to provide an opportunity for people to come to faith in Jesus.

Keywords: public health, epidemiology, vector, malaria, cancer, refugee, salvation

Volume 8 Issue 1 - 2024

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Received: January 07, 2024 | **Published:** January 26, 2024

Introduction

The risks to health are critical to individuals and communities across the globe. Spiritualism and the Christian doctrine are important in meeting the health needs of people and communities.[1] Developing technologies to reduce the risk to public health and at the same time help people have a chance to come to faith in Jesus is critical. It is the responsibility of Christians to help people in need; James 2:15-16 KJV," If a brother or sister be naked, and destitute of daily food, and one of you say unto them, Depart in peace, be ye warmed and filled; notwithstanding ye give them not those things which are needful to the body; what doth it profit?" The following technologies were developed to help protect human health and provide opportunities to share the Gospel of Jesus, with the goal of Saving Lives to Save Souls; ProVector vector control technology, ProVector Aromatherapy Christian Evangelism Coloring Kit (CHECK) Flower, BioTEMS, Bioagent Transport and Environmental Modeling System for biodefense and infectious disease modeling, and DNAudioDNArt Atomic Music for encouraging patients, educating, and sharing God's word with individuals and communities.

Vector-borne diseases (VBD) can pose a significant threat in refugee camps if the camp is located in an area with locally transmitted VBD or near communities where infected refugees can introduce VBD into a susceptible mosquito population. For example, nonimmune refugees could become infected in an area with malaria, or if they are infected, they could infect the local mosquito population.[2] The interaction between mosquito-borne diseases and other infectious diseases may also affect the impact of infectious diseases in refugee camps. Antibodies to dengue virus and *Plasmodium* species that cause malaria may provide some level of protection against symptoms of COVID 19, whereas persons with HIV are at higher risk of malaria than those who are not HIV positive.[3–5] Risk of malaria differs among genotypes of the host and of the malaria parasite, and treatment of patients with medication can occasionally have a deleterious effect on refugees with different genotypes. In western Thailand, the human leukocyte antigen (HLA) type of a person can affect susceptibility to and in a study conducted in a refugee camp in western Thailand, treatment of patients with malaria using aminoquinolines reduced enzymatic activity in some genotypes.[6,7] Because of the high number of variables that could affect the safety of refugees and the surrounding community, prevention of VBD by reducing mosquito populations should be a factor when developing the public health plan for refugee camps.

ProVector technologies use various pesticides including non-toxic pesticides e.g. *Bacillus thuringiensis* and essential oils. ProVector tech has been tested and used in several countries and including the United States, several countries in Africa, Central and South America, the Caribbean and Asia. Collaborators have included the World Health organization, Kenya Medical Research Unit, health departments, and the U.S. Dept of Defense, who have tested the ProVector tech and found it to be effective in controlling mosquitoes.[8–10] BioTEMS has been used in several countries to optimize infectious disease and vector control surveillance, including Ebola virus in Nigeria, Zika virus in the United States, invasive mosquito species and viruses in Iran, and bubonic plague in the United States, and Zika virus risk by a health depart in Texas.[11–15] It has also been used for military, national security and presidential inauguration in the United States.[16] In this study, the ProVector Flower with Entobac pesticide was tested for mosquito control of *Anopheles crucians*, a malaria vector, and *Aedes vexans* a virus vector, in a simulated refugee camp in Bulloch County Georgia, U.S. and BioTEMS was used to provide a malaria risk assessment in the refugee camp area should malaria be introduced.

The ProVector CHECK Flower kit contains a paper flower and crayons representing the wordless Gospel colors, and a aroma pad containing clove and lavender essential oils. The CHECK Flower has been used by pastors, missionaries, and parents, in several countries to provide a mild calming aroma while providing children the opportunity to color in the flower and explain the Gospel of Jesus using the colors. Countries where the CHECK FLOWER has been used include, Thailand, Peru, Mexico, Republic of Congo, Kenya, France, and the United States. Pastors, missionaries and parents and the children enjoy coloring the flower and smelling the aroma-therapy pad, and learning to share the Gospel of Jesus, Figure 1.

Figure 1 The ProVector Aroma Christian Evangelism Coloring Kit (CHECK) Flower being used to comfort and educate children about Jesus in Kenya, and the United States.

Courtesy Dr. Julius Kithinji Dean, Courtesy First Baptist Church, Statesboro, GA School of Theology, Kenyatta University

The DNAudioDNArt Atomic Music™ algorithm has been used to help calm, assist, and provide education to patients and communities globally. All chords, notes, and colors in the songs and art are based on DNA and atoms. Songs are recorded and sheet music is provided to assist individuals and communities. There has been feedback from numerous individuals that have been helped with the DNAudioDNArt Atomic music. A husband of a woman from China, who had fourth stage pancreatic cancer, asked if a song could be written for her. A song was written based on the genetics of pancreatic cancer and the human immune system, and recorded and written so that the husband could play along with it using his Chinese wooden flute. His wife wrote that she listened to the song every night and all night, and it helped her for several years. A song was written for a patient with skin cancer, which included her favorite verse, Philippians 4:13 KJV, "I can do all things through Christ which strengtheneth me." The patient wrote "Thank you from the bottom of my heart. I was so moved listening to this. You have a talent like I have never seen before. I will treasure this gift so much. You have blessed me." A song was written for a man with brain cancer who's insurance company would no longer pay for treatment. A special band event was held using the DNAudio brain cancer song and $50,000 was raised to help the patient pay for healthcare. An album using whale, dolphin and porpoise DNA, was written for Dr. James Watson, a Nobel prize winner, to help raise funds for his laboratory in New York.

A malaria song, entitled "Together We can Fight Malaria", was written for the Afro European and Medical Research Network, and various other groups to provide community education of malaria prevention and also provide opportunities to share the Gospel of Jesus Christs. The song and colors are based on the human immune system DNA, drug and vaccine treatments, pesticide Atomic structure, Anopheles species DNA, and Plasmodium species DNA. A song entitle "Fetal Life Song" was written to assist Pro-Life groups in assisting and educating pregnant mothers and other people in the community, that as sperm meets the egg cell, conception occurs, and a human life is formed and begins to further develop as a baby. The Fetal Life Song notes and colors are based on the genetics and moment of conception through the development of the fetal heart. The song "Fentanyl Free by the Son" is based on the Atomic structure of fentanyl and brain proteins. Songs were written based on the DNA of Peggy Kollars and Jeanne Kollars, the wife and mother of Thomas Kollars, who passed away and went to Heaven in 2015. The notes and colors in the pictures are based on their unique genomes. Listening to the songs and looking at the pictures has been very encouraging to Tom, and he wants to keep sharing the Gospel of Jesus so that people have a chance to go to Heaven and get the help of the Lord as they live in this challenging world. Song covers are also used to help educate and encourage patients and people facing emotional challenges, Figure 2.

Figure 2 Examples of song covers incorporating the DNA and atoms to produce songs and art to educate individuals and communities concerning health and the Gospel of Jesus and to help encourage people facing health and emotional challenges, Malaria song, Fetal Song, Fentanyl Song, Patient Song, Peggy Kollars who is now in Heaven, and the book of Genesis coded for with the DNA Jeanne Kollars who is now in Heaven.

Material and methods

The ProVector Flower with ProVector Entobac pesticide, active ingredient (AI) 7% Bacillus thuringiensis israelensis (Bti), is a target specific pesticide for adult and larva mosquitoes. It was tested for efficacy in laboratory trials and a simulated refugee camp verses a control site. Statistical analysis of data was conducted using Statistica software.

Laboratory trials

To test efficacy of ProVector Entobac against adult mosquitoes; 30 adult *Ae. aegypti* were placed in each of three control and three test cages. The control mosquitoes were provided a 10% sucrose solution. One ProVector Entobac bait pad was placed in each test cage. Survival was observed for 10 days. To test efficacy against mosquito larvae, 10 larval *Ae. aegypti* were placed in 200 ml of water for each sample, three negative controls, three positive controls with 0.5g Vectoprime FG (AI's 6.07% Bti and 0.10% S-methoprene), three tests with 0.5 g portion of Entobac bait pads, and three with 0.5g portion of post use Entobac bait pads. To test efficacy of adult dissemination of ProVector Entobac after to larval mosquitoes three sets each of one, two, four, six, eight and ten adult, *Ae aegypti* were used for controls to test the efficacy of adult *Ae aegypti* that succumbed to Entobac in controlling larva mosquitoes. To determine ProVector Entobac pad shelf life, 0.5g portion of Entobac pads stored for 10 and 12 years at room temperature were tested for efficacy in killing *Culex quinquefasciatus* larvae. Ten larvae were placed in 200 ml of deionized water containing each the portion of 10- and 12-year pads, and a negative control with 200 ml deionized water with no pesticide. The number of larvae surviving were counted at 6 and 12 hours.

Simulated refugee camp

A simulated refugee camp was set up in Meldrim Plantation, Bulloch County, Georgia to test the efficacy of the ProVector Flower with Entobac from 24 June through 12 August 2009. Control and test sites were chosen for their proximity to mosquito populations. The Test and Control sites were surrounded by mixed hardwoods on three sides and a field on the fourth side and the sites were 500 m apart. Sixteen BassPro7' x 7' dome tents were used to replicate a village in the test site and ProVector Flower with Entobac were hung within the tents, Figure 7. All window screens were cut out (with scissors) to allow mosquitoes access to the ProVector Flower with Entobac. Holes were placed in the floor to prevent rainwater from pooling in the tents. The 16 tents were placed 10 m apart in a 4x4 grid pattern. An initial mosquito collection (period 0) was conducted to determine the initial mosquito population and species at the Control and Test sites, before the ProVector Flowers with Entobac were placed in the tents. Four ABC light traps baited with CO2 and octenol were placed at the four corners of the Test and Control sites, After the initial collection, one ProVector Flower with an Entobac bait pad was placed in each tent; bait pads were replaced at the end of period 4 and 8. Mosquito collections were conducted two consecutive nights, every two weeks, after the initial collection. ANOVA with Fishers Least Significant Test was used to analyze collection data from the sites where N> 30, using Statistica software.

ProVector Tube with ProVector EcoBait

Two study sites were selected for the comparison of two essential oil pesticides. Mosquitoes were collected from each site for four trap periods, 30 days each. Period one consisted of pre-sampling from the two sites. Testing was conducted during periods two, three, and four. Three trap stations, consisting of CDC light and BioGents Sentinel (BGS) traps (BioGents Corporation, Regensburg, Germany) were baited with Flowtron Octenol (Armatron International, Inc., Malden, MA) and CO_2 (0.5 kg dry ice) were placed at each site for four nights each period with a minimum of one night between each night of trapping per site. The positive control (PC) site was treated with Terminix All Clear ATSB Mosquito Bait Concentrate (0.1% garlic oil) mixed with one part concentrate with three parts water, applied using a backpack sprayer in an up and down motion on vegetation from 0.3m to 1.5 m above ground along the perimeter. The test site (T) site was treated with 16 ProVector tubes containing 20g ProVector EcoBait, active ingredients; 1.5% Eugenol, 0.25% Clove oil, and 0.25% Thyme oil placed 10m apart in a grid. Statistical analysis was conducted using Statistica v13.3. Comparisons between the mean number of total mosquitoes and individual mosquito species between trap periods at sites was tested using ANOVA with Fisher's LSD test. The ProVector tube utilizes the colors that attract various mosquito species, and they are also the same as the wordless Gospel colors used to share the Gospel, and the tube includes John 3:16 in Swahili, Spanish, French and English, Figure 8.

Results

Laboratory trials

ProVector Entobac was effective in killing adult mosquitoes, larva mosquitoes, and in adult transmission of Entobac to kill larvae. ProVector Entobac had a significant effect on adult *Ae aegypti* survival. There was a significant difference by day two between the control and test groups, using ANOVA with Fishers Exact Test, Table 1 and Figure 3.

Table 1 ANOVA, Fishers Least Significance test between survival of adult *Aedes aegypti* feeding on Entobac vs control

Test	D1	D2	D3	D4	D5	D6	D7	D8	D9	D10
	Mean	Mean	Mean	Mean	Mean	Mean	Mean	Mean	Mean	Mean
C	30	30	29.67	29	29	29	28.67	28.33	28.33	27.67
E	27.67	20.33*	16.67*	12.00*	11.67*	5.33*	3.00*	1.67*	1.67*	1.67*
MS	2.12	13.17	16.33	14.5	11.67	5.17	7.17	2.33	2.33	1.33

ProVector Entobac had a significant effect on mosquito larvae. Within 24 hours all 30 larvae died in the Entobac bait pad and VectoPrime containers, 29 died in the post use Entobac bait pad and no larvae died in the control containers, Kruskall Wallis, Median Test, Chi-Square = 12.50909 df = 3 p = .0058, Figure 4.

There was a significant difference between control and test groups in survival of *Ae. aegypti* larvae during the ten day period, between those exposed to control and those exposed to adults which succumbed to ProVector Entobac, using Kruskal-Wallis test (Figure 4). By day five, significantly more larvae had died in the test than control groups when exposed to one adult *Ae. aegypti* (H 1, N= 48) =9.70 $p<0.05$, and two adult Ae. aegypti (H 1, N= 48) =7.25 $p<0.05$. By day two, significantly more larvae had died in the test than control groups when exposed to four adult *Ae. aegypti*, (H 1, N= 48) =13.49 $p<0.05$). By day one, significantly more larvae had died in the test

than control groups when exposed to six adult *Ae. aegypti*, (1, N= 48) =13.49 p<0.05) and 10 adult *Ae. aegypti* (H 1, N= 6) =3.97 p<0.05), Figure 5.

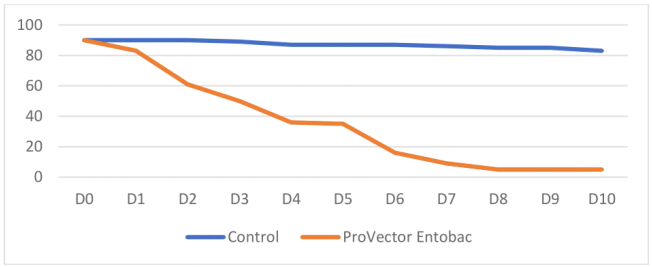

Figure 3 Number of adult *Ae. aegypti* surviving 10 days after feeding on ProVector Entobac.

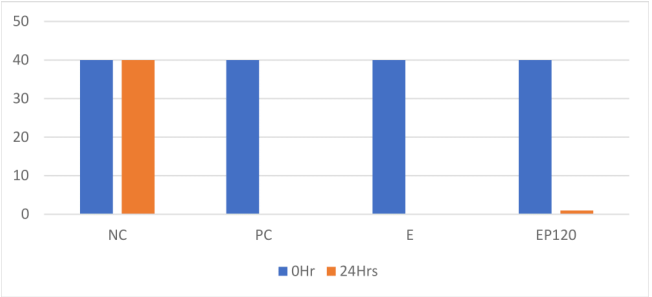

Figure 4 Survival of *Ae. aegypti* larvae after 24 hours exposure to pesticides, NC negative control, PC VectoPrime, E ProVector Entobac, EP ProVector Entobac after 120 days of field use in ProVector applicator.

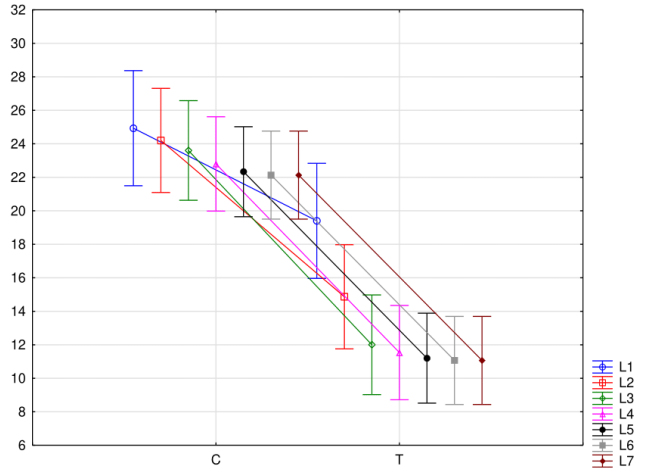

Figure 5 Mean survival of *Ae. aegypti* larvae after 10 days when different numbers of dead control adult *Ae. aegypti* not exposed to ProVector Entobac and dead adult *Ae. aegypti* fed on ProVector Entobac were placed in the water. Vertical bars denote 95% confidence level, L# represents number of dead adults placed in water with larvae, C: control, T: test.

In the shelf-life efficacy test of ProVector Entobac Bait pads stored for 10 to 12 years, all control larvae survived, and all test larvae died within 12 hours. There was a significant effect on larval survival by the 10 and 12 year Entobac pads, p<0.05, Chi-square 21.4 at 6 hours and 30 at 12 hours, Figure 6.

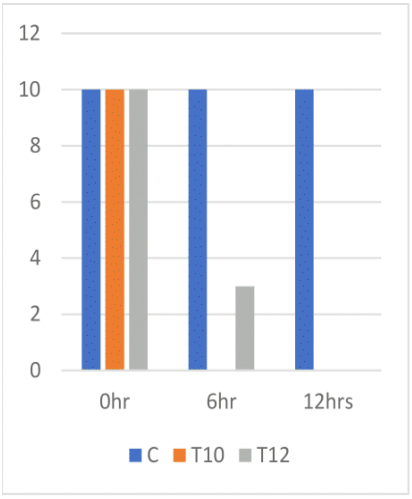

Figure 6 Survival of *Culex quinquefasciatus* larvae exposed to ProVector Entobac pads stored for 10 and 12 years at room temperature (C: control, T10: stored 10 years, T12: stored 12 years.

Simulated refugee camp

There was a significant increase in the mean number of *Ae. vexans* captured by the second week and no significant reduction in *An. crucians* within the control site compared to the week 0 testing. There was a significant reduction in *Ae. vexans* and *An. crucians* in all weeks compared to the week 0 before pesticides were applied < 0.05, Table 2.

Table 2 Comparison of the mean number of individual mosquito species captured with week zero and subsequent weeks within the control and test sites, (where N>30, mean and sd, *where P≤0.05) using ANOVA, (mean over standard deviation)

Site and Species	Total	Week					
Control Site	Total	0	2	4	6	8	10
Aedes vexans	33	1	2.63*	0	0.25	0	0.5
		1.1	3.02		0.71		0.76
Anopheles crucians	129	4.67	1	5.13	4.75	1.13	0.63
		4.76	1.41	6.9	5.55	1.46	0.74
Test Site							
Aedes vexans	58	6.5	0.38*	0.13*	0.25*	0*	0*
		5.34	0.52	0.35	0.46		
Anopheles crucians	188	9.38	1.25*	4.75*	4.88*	2.00*	1.25*
		5.58	2.05	4.65	4.39	1.93	1.91

ProVector tube with Provector EcoBait

The mean number of total mosquitoes at the positive control site did not decrease or increase significantly between periods 1, 2 and 3 but increased significantly in period 4, whereas the total number of mosquitoes decreased significantly from the first period, in periods 2, 3 and four in the EcoBait site, Table 3 and Figure, 7,8, 9.

Table 3 Differences in mean number of the two mosquito species captured within study sites compared to the pretreatment period,* indicates significantly higher or lower mean ($p \leq 0.05$) compared to the pretreatment period 1

Site	Period 1	Period 2	Period 3	Period 4
PC	151.21	124.26	88.08	338.78*
EcoBait	51.42	25.22*	16.87*	24.71*
MS=6822.2, df=180.00				

Figure 7 ProVector with Bait Pad (left) were hung within 16 tents placed in a grid (center) at the test site in Bulloch County, Georgia USA. The ProVector Flower (right) has since been adapted from a hard plastic flower to a laminated flower with John 3:16 in Swahili, Spanish, French and English to help save lives and save souls.

Figure 8 ProVector tube hanging from tree in test site.

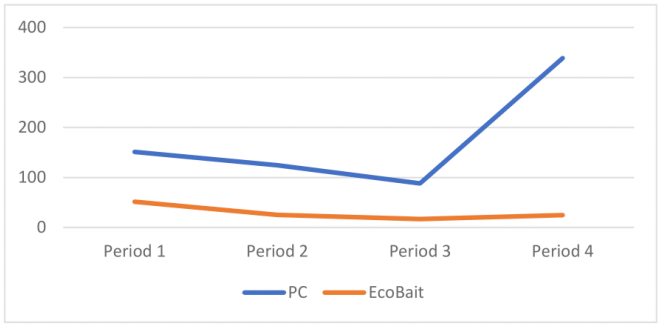

Figure 9 Mean number of mosquitoes captured in the Control and EcoBait sites.

Discussion

There is evidence globally, that music and art helps patients both psychologically and physiologically.[18–20] Music therapy has been shown to help patients in pain and spiritually. Music therapy was found to help the quality of life of cancer patients and was effective in decreasing pain, depression, and anxiety.[21] Music therapy can be effective in improving the spiritual well-being of patients with life threatening diseases and should be used to help patients with spiritual and existential needs.[22] DNAudioDNArt Atomic Music is a unique technology to use science and art to educate, assist, encourage people, and share God's Word to help people with health and spiritual needs based on the genetic and molecular aspects of their disease and the Word of God. Feedback from people globally shows how DNAudioDNArt Atomic Music has helped them face life's difficulties and to educate people on various health issues. This technology has been used to educate and encourage attendees at the New Beginnings in Christ, Drug and Rehabilitation center in Garfield, Georgia, help encourage the family members of people with serious health problems, and help raise funds for patients, and bring attention to health foundations, zoos, and wildlife organizations. An important aspect of the technology that has been included in the songs and on the song covers and art, is the Word of God, so that people can be also helped emotionally and spiritually.

In the laboratory trials, ProVector Entobac had a significant effect on the survival of adult and larva *Ae. aegypti* and the number of dead adults who succumbed to ProVector Entobac significantly reduced survival of larva when placed in the water. Because it takes about two days for ProVector Entobac to have a significant effect on lethality to adult mosquitoes, there is potential for the adults to transport and control larvae mosquitoes in breeding sites. This will likely have an effect on the overall mosquito populations in and around refugee camps, including *Cu. quinquefasciatus*, as shown by the efficacy against larvae. This large area of control, outside where the ProVector Flowers were placed, occurred on the property and reduced mosquito populations and subsequently the risk of mosquito-borne diseases. If a refugee settlement was placed in this area of Georgia, there would be an increased risk of disease transmission to refugees if the local mosquito population was infected with VBD or increased risk to local communities if infected refugees were infected with VBD. It is essential for public health directors of refugee camps to be aware of the risk of importing VBD through infected refugees or infecting refugees due to local VBD transmission by vectors.

Mosquito control is essential for the success of integrated-vector control programs in controlling the risk of VBD in communities and refugee camps.[23] In laboratory trials, ProVector Entobac was found to be effective in rapidly reducing adult and larva *Ae aegypti*, a vector of dengue, chikungunya, Zika and yellow fever viruses. ProVector Entobac ingested by adult *Ae aegypti* was also effective in controlling larva when adults, who succumbed to the pesticide, were placed in larva containers. The long shelf-life ProVector Entobac pad, up to 12 years, is significant because it provides the flexibility of Integrated Vector Control programs to store non-toxic pesticides over extended time to be prepared to control mosquito populations during fluctuations and to respond emergencies.

ProVector Entobac was effective in reducing mosquito adults and larvae in the laboratory, with the added advantage of the adult mosquitoes transporting the pesticide to eliminate larvae. The ProVector Flower with ProVector Entobac pad was effective in reducing and controlling *Aedes vexans*, a vector of dengue, zika and other VBD in humans and mammals, and *Anopheles crucians*, a vector of malaria and other VBD in humans and mammals. The effectiveness of the ProVector Flower with ProVector Entobac in reducing populations of medically important mosquito species was also found in housing compounds in Kenya, and hotel grounds in the Dominican Republic.[9–17] BioTEMS provided risk assessment for malaria should it be introduced into the community and it can be used for risk assessment of other infectious diseases and bioagents. ProVector pesticides can be applied using flowers or tubes, and

mosquitoes are attracted to the bait and the colors and eat the bait, and the colors can be used to share the Gospel of Jesus.

The ProVector tube with EcoBait was more effective in controlling total mosquito populations than essential oils that are sprayed. ProVector EcoBait has also been used with pads on flowers and used within bottles, with holes in the caps to provide access to the pesticide by mosquitoes and Romans Road on the paper with the Gospel colors, inserted within the tube. ProVector devices with EcoBait have been used to help reduce mosquito populations in Georgia, Texas, and Florida, while also providing opportunities to share the Gospel with hundreds of families. Further registrations within other states in the U.S. are upcoming.

Conclusion

The ProVector Flower was originally designed and tested using colors that attract different species of mosquitoes, but the Lord had a reason for the design that was unknown to the inventor, Dr. Tom Kollars. It was revealed to Tom and his wife Peggy, who is now with Jesus, by a nurse in Kenya. After the nurse who managed an orphanage in Kenya met us at a Global Missions Health Conference in Louisville, KY, she explained malaria was eliminated from the children in the orphanage, and it reduced mosquito numbers greatly. She then said how the colors on the ProVector Flower were the same as the wordless Gospel. I said, "I'm a believer, but I never heard of the wordless Gospel, what is that?" She told me, "The black represent sin, because of sin we are separated from God. The red represents the blood of Jesus, the Song of God, who died on the cross for our sins. The white represents our sins being washed away by the blood sacrifice of Jesus for the forgiveness of our sins and we receive eternal life, when we have faith in Jesus. The blue is baptism. The green is growing faith. The yellow is the streets of gold in Heaven." This was a major pivoting point in my life. The Lord spoke to my heart and said to start putting scripture on the ProVector products, and now families in many countries are being helped by reduction of mosquitoes and hearing the Gospel of Jesus, so they can come to faith in Jesus and go to Heaven and be helped by God while they are on earth. With the adaptation of the ProVector flower to a coloring kit with an aroma pad, churches, missionaries, families, and children are being helped to do things together in love, have a nice mild smelling device hanging in their room, and they learn the Gospel of Jesus and how to share it.

The ProVector, BioTEMS, and DNAudioDNArt Atomic Music technologies are useful in helping protect health, encourage people, and provide them with the chance to come to faith in Jesus and go to Heaven. Bible verses that are used to help people come to faith in Jesus are: John 3:16 KJV, "For God so loved the world, that he gave his only begotten Son, that whosoever believeth in him should not perish, but have everlasting life." and Romans 10:9 KJV, "That if thou shalt confess with thy mouth the Lord Jesus, and shalt believe in thine heart that God hath raised him from the dead, thou shalt be saved." Every person who has faith in Jesus is encouraged to help other people, whether saved or not and to tell them the Gospel of Jesus. If a person does not know if they are going to Heaven or Hell, they should be encouraged to please come to faith in Jesus, because then they will know they will be forgiven of their sins, and be helped while they are on earth and will go to Heaven should they die. Another technology is being tested to convert plant energy into electricity to provide power to medical and other devices to help families in areas without electricity. One acre of plants may provide enough energy for 6 homes.

Acknowledgments

Funding for portions of the ProVector vector control testing was provided by the Walter Reed Army Institute of Research, Contract Number W81XWH18C0322. The views expressed are those of the authors and do not necessarily reflect the official views of Liberty University, Anderson University, Walter Reed Army Institute of Research, or the Department of Defense. I would like to dedicate this paper to my wife Peggy Kollars and my mother Jeanne Kollars who passed away three weeks apart in 2015. Peggy also conducted research in the simulated refugee camp and we came up with the goal "Saving Lives to Save Souls", together. My mother helped me come to faith in Jesus and helped me through many hardships as a child. I have peace, knowing I will see them again because they had faith in Jesus, and I have faith in Jesus, so we will see each other in Heaven.

Conflicts of interest

There is not a conflict of interest. Thomas Kollars is the inventor of the technologies but he is not focused on money. He is focused on Saving Lives to Save Souls. One organization offered 75-100 Million USD per year for an exclusive contract but demanded he would take the Gospel off the ProVector products. He turned it down but got a chance to tell them about Jesus. Praise God, Peggy said he made the right decision.

References

1. Tiago MS. Spiritism, mental health, and public health: spiritist therapeutics under discussion. *MOJ Public Health*. 2023;12(3):145–150.
2. Martens P, Hall L. Malaria on the move: human population movement and malaria transmission. *Emerg Infect Dis*. 2000;6(2):103–109.
3. Odilson M Silvestre, Letícia R Costa, Bianca V R Lopes, et al. Previous Dengue Infection and Mortality in Coronavirus Disease 2019 (COVID-19). *Clinical Infectious Diseases*. 2020;73(5):e1219–e1221.
4. Mahajan NN, Gajbhiye RK, Bahirat S, et al. Co-infection of malaria and early clearance of SARS-CoV-2 in healthcare workers. *J Med Virol*. 2021;93:2431–2438.
5. Sanyaolu AO, Fagbenro-Beyioku AF, Oyibo WA, et al. Malaria and HIV co-infection and their effect on haemoglobin levels from three health-care institutions in Lagos, southwest Nigeria. *Afr Health Sci*. 2013;13(2):295–300.
6. Kollars TM Jr, Phasuk R, Sattabongkot J. Variation of circumsporozoite 26 and 29 genotypes of Plasmodium falciparum infecting patients and association with HLA-DQA allotypes in western Thailand. *J Parasitol*. 2004;90(1):182–184.
7. Bancone G, Chu CS, Somsakchaicharoen R, et al. Characterization of G6PD Genotypes and Phenotypes on the Northwestern Thailand-Myanmar Border. *PLoS ONE*. 2014;9(12):e116063.
8. Nze-Daniel M, Ausumana TK, Brewahl P, et al. Reducing Mosquitoes in Freetown, Sierra Leone Using the ProVector Pesticide System. *CTBE&B*. 2018;12:1–4.
9. Yalwala S, Kollars JW, Kasembeli G, et al. Preliminary report on the reduction of adult mosquitoes in housing compounds in western Kenya, using Entobac biopesticide and the ProVector Flower. *J Med Ent*. 2016;83:1252–1254.
10. Kollars Thomas, Bannie Hulsey, Richard McCombs. The Effect of an Attractant Toxic Sugar Bait (ATSB) incorporating *Bacillus thuringiensis israelensis* and Methoprene on Mosquito Populations in Bulloch County, Georgia. *Christian Journal for Global Health*. 2024.

11. Kollars TM, Senessie C, Asomba T. Identifying cryptic reservoirs of Ebola in Sierra Leone and determining areas at risk in Cameroon. *African J Clin Exp Micro*. 2018;19:229–237.

12. Kollars TM. Potential for the Invasive Species *Aedes albopictus* and Arboviral Transmission through the Chabahar Port in Iran. *J Iranian Med Sci*. 2017;43:393–400.

13. Kollars, TM. Assessing likely invasion sites of Zika virus infected mosquitoes and naval maritime ports in Florida. *Res Rep Trop Med*. 2017;8:1–6.

14. Thomas M Kollars, Eric L Kollars. United States Air Force Academy: Identifying Areas at Risk for the Persistence of Plague using the Bioagent Transport and Environmental Modeling System (BioTEMS). *J Microbiol Modern Tech*. 2017;3(1):101.

15. Kollars TM, Reyes M, Fredregill C, et al. Modeling Integrated Vector Management of Zika Virus in Harris County and the City of Houston, Texas. *IJMSIR*. 2018;3:229–334.

16. Kollars TM, Kollars JW. Risk Assessment Mapping for Zoonoses, Bioagent Pathogens and Vectors at Edgewood Area, Aberdeen Proving Ground, Maryland. *US Army Medical Department Journal*. 2018;40–48.

17. Kollars TM, Hatfill S, Kollars EL. Mosquito populations and reducing the risk of mosquito-borne diseases in a beach resort of Punta Cana using eco-friendly technologies. *J Pharma Biol.* 2016;11:1–4.

18. Gizem İlayda Geyik, Sibel Doğan, Hanefi Ozbek, et al. The effect of music therapy on the physical and mental parameters of cancer patients during hematopoietic stem cell transplantation. *Persp Psych Care*. 2020;57(2):558–564.

19. Tollabzadeh M, Rezvani AR, Behzadipour S. The Effect of Music Therapy on Pain, Anxiety, Perceived Stress, and Biochemical Parameters in Hospitals Among Patients with Cancer. *Shiraz E-Medical Journal*. 2023;10:1–9.

20. Stuckey HL, Nobel J. The connection between art, healing, and public health: a review of current literature. *Am J Public Health*. 2010;100(2):254–263.

21. Li Y, Xing X, Shi X, et al. The effectiveness of music therapy for patients with cancer: A systematic review and meta-analysis. *J Adv Nurs*. 2020;76(5):1111–1123.

22. Huda Nurul, Banda Kondwani Joseph, Liu An-I, et al. Effects of Music Therapy on Spiritual Well-Being among Patients with Advanced Cancer in Palliative Care: A Meta-Analysis of Randomized Controlled Trials. *Seminars of Oncology Nursing*. 2023;39(6):151481.

23. Kolimenakis A, Tsesmelis D, Richardson C, et al. Knowledge, Attitudes and Perception of Mosquito Control in Different Citizenship Regimes within and Surrounding the Malakasa Open Accommodation Refugee Camp in Athens, Greece. *Int J Environ Res Public Health*. 2022;19(24):16900.