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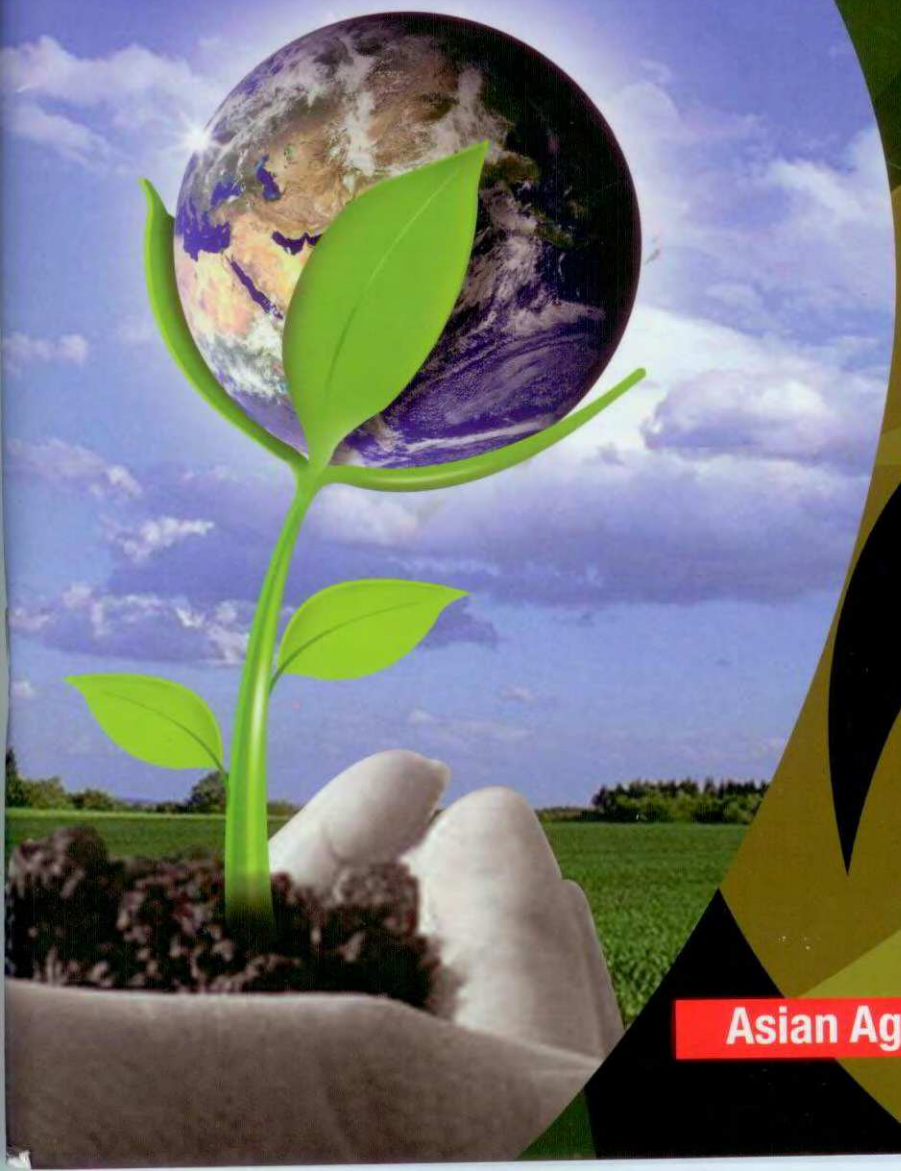

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Yogic Farming through Brahma Kumaris Raja Yoga Meditation: An Ancient Technique for Enhancing Crop Performance

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Abstract

Yogic farming means doing various farming operations in a yoga (connection/union) state or personally empowered state of mind. The Raja yoga meditation technique of personal empowerment is an ancient technique of India. It is being revived by the Raja Yoga Education and Research Foundation, a sister organization of the Brahma Kumaris World Spiritual Univesity, a non-governmental organization headquartered at Mount Abu, Rajasthan. The organization has been teaching methods of personal empowerment based on Brahma Kumaris Raja Yoga Meditation (BKRYM) techniques for the last 77 years. The present article reviews bonafide research conducted at the GB Pant University of Agriculture and Technology (GBPUAT), Pantnagar, Uttarakhand (2012–13); on a farmer's field in Gagsina village, Karnal, Haryana (2011–12); and at the SD University of Agriculture and Technology (SDUAT), Dantiwada, Gujarat (2009–12), in order to discuss the effect of yogic farming through BKRYM on the different aspects of seed and crops as well as its feasibility in agricultural transformation. Seeds exposed to BKRYM revealed enhanced germination, seedling growth, and vigor. The quality of groundnut and wheat improved, along with increased soil microbial population. After three years of experimentation, the yield of wheat and groundnut obtained with organics + BKRYM was found to be comparable to that obtained with chemical inputs. BKRYM works best under organic farming.

The phenomenal growth in food production achieved during the past few decades is generally attributed to the technologies of the Green Revolution. However, the imbalanced use of chemical fertilizers and pesticides in recent years has received severe criticism and technocrats as well as policymakers have now realized that

this jump in agricultural production was basically achieved at the cost of the agro-ecosystem as well as human health. The rate of environmental degradation has triggered a global alarm, resulting in the search for ecologically sound, socially viable, and sustainable farming systems (Kumari *et al.*, 2012). Many critics of chemical input based agriculture have realized that organic farming, which aims at cooperating with – rather than confronting – Nature, is the only answer to many of our present-day ills. Yogic agriculture is a step ahead of organic farming. Yogic farming means doing various farming operations in a yoga (connection/ union) state or personally empowered state of mind (see endnote).

The *Shaswat Yogik Kheti* is an additive cultivation practice to organic agriculture, to obtain safe produce and to help improve the agro-ecosystem by attaining a pure, powerful and elevated metaphysical state through Raja yoga meditation for the treatment and betterment of seed, plants, water, land, and microbes in the field, garden, orchard, or forest. It is claimed to be helpful to animals and human beings, too. Since metaphysical energy produced during Raja yoga meditation is nonspecific in nature for making seed, crop, land, water and associated metabolic processes more powerful, it can be associated with any form of ecological or organic farming practices. The acceptance and recognition of metaphysical energy is increasing worldwide; it is a nonmonetary input, ideal for safe farming and food as well as a powerful tool for social transformation. Metaphysical energy, in the form of pure, positive, elevated thoughts, has been found to change water quality (Grad, 1963; Emoto, 2004), seed germination (Rondey *et al.*, 2003; Du Charme Laurene, 2007), growth and development of crop plants, as well as the health of the people (Du Charme Laurene, 2007). It has been reported that plant leaves registered a change in electrical resistance when the plant was harmed, or even threatened with harm, and that plants therefore perceived human intentions (Backster, 1968). Considering this fact, it is high time to shift from chemical-intensive farming to bio-intensive farming (Yadav *et al.*, 2008). One of the practices that can further enhance bio-intensive farming is the use of metaphysical energy created during Raja yoga meditation in the organic mode of cultivation. Many people today have the ability to observe or sense the hidden power of metaphysical energy, but few are capable of channeling it appropriately. There should be greater public effort towards practicing Raja yoga, and generating pure and powerful metaphysical energy for the well-being of this planet.

Researchers of quantum physics suggest that we humans are electromagnetic beings, and that our thoughts radiate out from us like a broadcast signal inspecting things inside and around us (Lipton, 2012). This gives a whole new meaning to "watch what you think". However, such studies remain an unexplored dimension in the area of crop production, that is, the use of metaphysical energy in agriculture. A number of Indian farmers (especially in Uttarakhand, Rajasthan, Gujarat, and Maharashtra) are beginning to acknowledge that to sustain agricultural production, a healthy environment, and

viable farming communities, there must be whole-systems approach to agriculture, incorporating the traditional knowledge of ancient Indian Raja yoga meditation with organic agriculture, which helps link agro-ecosystem culture, economics, and society. Yogic agriculture utilizes a system-wide approach, recognizing all elements of farming: humans, animals and birds, flying and crawling insects, microorganisms, seeds, crops, vegetation and surrounding ecosystems, as well as the natural elements of the universe, i.e., the sun, soil, air, water, and space. This unique method is now being tested at various State Agricultural Universities in India through bonafide research that has been reviewed here. The practice of Raja yoga meditation helps in increasing farmers' self-esteem, thereby reducing the frequency of farmer suicides and social violence in families and villages. The present study aimed to collect information from different places on the effect of Raja yoga meditation (specifically, the 'Brahma Kumaris Raja Yoga Meditation', BKRYM) on various aspects of agricultural crops, such as seed germination, seedling vigor, growth, quality, and yield and microbial soil populations for greater awareness of this approach and its potential benefit for the future of agriculture.

Materials and methods

For more than 75 years, the Brahma Kumaris World Spiritual University has been teaching methods of personal empowerment based on techniques of BKRYM. These methods include understanding of the self as a soul (energy), managing the energy of the mind, becoming cognizant of the relationship between thoughts and behavior, maintaining a thought-union with the Divine and experiencing enlightenment states that fill the mind and character with strength (Tamasin, 2012). Thus, one can enhance his inner nature positively, and the thoughts created at this stage are used for the betterment of his outer nature. The Rural Wing of the Raja Yoga Education and Research Foundation (a sister organization of the Brahma Kumaris World Spiritual University) has revived and popularized the concept of this meditation-based thought vibration energy/metaphysical energy and its effect on agriculture.

The data from (i) laboratory experiments on wheat (*Triticum aestivum*) and chickpea (*Cicer arietinum*) conducted at GB Pant University of Agricultural and Technology (GBPUAT), Pantnagar, Uttarakhand (2012–13) to study the effect of metaphysical energy through BKRYM practice on seed germination, seed quality, and vigor; (ii) field experiments carried out on groundnut (*Arachis hypogaea*) and wheat at SD University of Agriculture and Technology (SDUAT), Dantiwada, Gujarat during 2009–12; and (iii) experiments on wheat on a farmer's field in Gagsina village, Karnal, Haryana during 2011–12, were collected from the scientists concerned, and the compiled review is presented in this paper.

At GBPUAT, Pantnagar, a laboratory experiment was conducted in the seed physiology laboratory, Department of Agronomy to study the effect of energy treatments (i.e., electromagnetic strength and

Many critics of chemical input based agriculture have realized that organic farming, which aims at cooperating with – rather than confronting – Nature, is the only answer to many of our present-day ills. Yogic agriculture is a step ahead of organic farming.

metaphysical energy) on seed germination and seedling vigor of wheat and chickpea.

The seeds were exposed to a magnetic field of 100–250 mT (milli Tesla), in steps of 50 mT for 1 to 4 hours, in steps of 1 hour for all field strengths. The samples were kept in a plastic container between the poles of the electromagnetic field having a uniform magnetic field for the required duration. The required strength of the magnetic field was obtained by regulating the current in the coils of the electromagnet. The strength of the magnetic field between the poles was measured by a Gauss meter.

Metaphysical energy treatment for 1 to 4 hours, in steps of 1 hour, was given by a trained Raja yogi from the Brahma Kumaris World Spiritual University (Mount Abu, Rajasthan).

All treatment combinations along with the control were run simultaneously under similar sets of conditions. The standard germination test was conducted as per ISTA (2009) in four replications, using the paper towel method. Fifty seeds were placed between two layers of moist germination paper, rolled properly and wrapped along with butter paper to reduce evaporation

Since metaphysical energy produced during Raja yoga meditation is nonspecific in nature for making seed, crop, land, water and associated metabolic processes more powerful, it can be associated with any form of ecological or organic farming practices. The acceptance and recognition of metaphysical energy is increasing worldwide; it is a nonmonetary input, ideal for safe farming and food as well as a powerful tool for social transformation.

from the surface. The samples were placed in a seed germinator maintained at 20±2°C for 8 days. After 8 days, the germination percentage was calculated on the basis of the number of normal seedlings. Seedling vigor index was calculated by multiplying germination (%) with seedling length (i.e., root + shoot length) (cm/seedling).

The field experiment comprising four treatments [Yogic + organic (farmyard manure, FYM at 15 tons/ha); only organic

Many people today have the ability to observe or sense the hidden power of metaphysical energy, but few are capable of channeling it appropriately. There should be greater public effort towards practicing Raja yoga, and generating pure and powerful metaphysical energy for the well-being of this planet.

(FYM at 15 tons/ha); recommended chemical fertilizers (100 kg N/ha and 60 P_2O_5 kg/ha); and the control (no FYM or chemical fertilizers)] was conducted on a farmer's field in Gagsina village, Karnal, in a randomized block design with four replications, on sandy clay loam soil having low to medium soil fertility, during the *rabi* season of 2011–12, with the objective of studying the effect of yogic and organic production of wheat. The wheat variety C 306 (*deshi* tall wheat variety) was grown. The sowing of the crop was done on November 9, 2011, and harvested on April 12, 2012.

At SDUAT, Dantiwada, an experiment with treatments consisting of three modules – OFM-I (organic farming module-1), OFM-II (organic farming module + yogic), and CIM (chemical input module) – was conducted during 2009–10 to 2011–12, under a memorandum of understanding between SDUAT and the Brahma Kumaris World Spiritual University.

A number of Indian farmers (especially in Uttarakhand, Rajasthan, Gujarat, and Maharashtra) are beginning to acknowledge that to sustain agricultural production, a healthy environment, and viable farming communities, there must be whole-systems approach to agriculture, incorporating the traditional knowledge of ancient Indian Raja yoga meditation with organic agriculture, which helps link agro-ecosystem culture, economics, and society.

For more than 75 years, the Brahma Kumaris World Spiritual University has been teaching methods of personal empowerment based on techniques of Brahma Kumaris Raja Yoga Meditation (BKRYM). These methods include understanding of the self as a soul (energy), managing the energy of the mind, becoming cognizant of the relationship between thoughts and behavior, maintaining a thought-union with the Divine and experiencing enlightenment states that fill the mind and character with strength.

Results and discussion

Laboratory experiments at Pantnagar

In the laboratory experiment at GBPUAT, Pantnagar the effect of different energy levels and exposure periods on seed germination and seedling vigor was studied.

Wheat seed. The results indicated that the percentage germination of wheat seeds remained largely unaffected due to different energy levels and exposure time. However, slight increase in germination percentage was noticed due to the magnetic field (250 mT) as well as the metaphysical energy treatments (Table 1). The mean root length was significantly higher due to the metaphysical energy treatment compared with the magnetic field treatments and control. Exposure time did not affect the mean root length; however, 2 to 3 hours exposure led to higher values for mean root length. The mean shoot length and seedling

Table 1. Effect of different energy treatments and variable period of exposure on germination and seedling vigor of wheat.

Exposure period (hour)	Control	Energy treatment[1] 100 mT MS	150 mT MS	200 mT MS	250 mT MS	MPE	Mean
Germination (%)							
1	98.0	99.5	98.5	97.0	99.0	99.5	98.6
2	98.0	99.0	98.0	99.0	99.5	99.5	98.8
3	98.0	98.0	99.0	97.0	99.0	99.5	98.4
4	98.0	99.0	99.0	99.0	98.5	99.0	98.8
Mean	98.0	98.9	98.6	98.0	99.0	99.4	98.6
CD (5%)		Exposure period: NS[2]		Energy treatment: NS		Interaction: NS	
Root length (cm/seedling)							
1	15.7	16.6	16.8	16.1	17.0	18.1	16.7
2	15.7	17.4	16.8	16.7	17.0	19.1	17.1
3	15.7	17.1	16.9	17.8	16.8	18.2	17.1
4	15.7	17.3	17.0	16.3	17.0	18.1	16.9
Mean	15.7	17.1	16.9	16.7	16.9	18.4	16.9
CD (5%)		Exposure period: NS		Energy treatment: 0.5		Interaction: NS	
Shoot length (cm/seedling)							
1	6.34	7.16	7.56	7.23	7.07	8.42	7.30
2	6.34	7.08	7.54	7.26	7.58	9.01	7.46
3	6.34	7.34	7.16	7.28	7.38	8.35	7.31
4	6.34	7.60	7.14	7.39	7.23	8.62	7.39
Mean	6.34	7.29	7.35	7.29	7.31	8.60	7.36
CD (5%)		Exposure period: NS		Energy treatment: 0.33		Interaction: NS	
Seedling vigor index							
1	2161	2367	2400	2267	2379	2625	2666
2	2161	2419	2384	2376	2442	2791	2429
3	2161	2390	2378	2429	2398	2621	2396
4	2161	2456	2390	2350	2382	2649	2398
Mean	2161	2408	2386	2355	2400	2671	2997
CD (5%)		Exposure period: NS		Energy treatment: 83		Interaction: NS	

1. MS = milli Tesla magnetic strength; MPE = Metaphysical energy created during BKRYM.
2. NS = Not significant.

vigor index increased significantly due to the metaphysical energy treatment compared with the remaining treatments. Magnetic field treatments did not differ significantly in influencing shoot length. The control treatment showed significantly lower root length, shoot length, and seedling vigor index compared with the remaining treatments. No interaction existed between energy levels and exposure time. The vibrational energy works through its effect on water. Positive thought vibrations given to any life-form have been found to form beautiful hexagonal crystals of water or water present in the lives (Emoto, 2004), and also changes the molecular structure of water (Grad, 1963). The better crystalloid water used inside or from outside has been found more active in growth and development by way of enhancing associated metabolic processes. Thus, water not only has the ability to visually reflect the environment, but also reflects the environment at the molecular level (Sharp, 2014). In the present study, too, the positive metaphysical energy might have influenced the water present inside the seed as well as the water used for germination, thereby enhancing the seed germination, seedling growth, and seedling vigor index.

The mean root length was significantly higher due to the metaphysical energy treatment compared with the magnetic field treatments and control. Exposure time did not affect the mean root length; however, 2 to 3 hours exposure led to higher values for mean root length.

Chickpea seed. The interaction for germination percentage between energy levels and exposure time was significant (Table 2). Seeds exposed to metaphysical energy or 150 or 250 mT magnetic field energy for 1 hour led to similar germination of seeds, and these three treatment combinations remained at par with all other treatment combinations except the magnetic field 200 mT exposed for 4 hours and 250 mT for 3 and 4 hours. These results suggest that seed exposure to metaphysical energy or magnetic field energy of 150 mT for 1 to 4 hours is better to obtain higher seed germination percentage of chickpea. Williams (1999) reported enhanced germination of various types of seeds due to positive prayers given to the water used for germination, and halted germination due to negative prayers given to the water.

The interaction between energy levels and exposure time to seeds was significant with respect to root length (Table 2). The root length of chickpea seeds was significantly higher due to metaphysical energy exposed to seeds for 4 hours compared with the remaining treatment combinations, except the 100 and 150 mT for 1 and 2 hours, and 200 mT for 2 and 3 hours magnetic field exposures.

The interaction between energy levels and exposure time was significant with respect to shoot length (Table 2). The shoot length was highest due to 100 mT magnetic field exposed for 3 hours and metaphysical

Table 2. Effect of different energy treatments and variable periods of exposure on germination and seedling vigor of chickpea.

Exposure period (hour)	Energy treatment[1]						
	Control	100 mT MS	150 mT MS	200 mT MS	250 mT MS	MPE	Mean
Germination (%)							
1	91.0	93.0	93.5	91.0	93.5	93.5	92.6
2	91.0	90.5	91.0	92.5	91.0	89.5	90.9
3	91.0	88.5	91.0	91.0	84.0	90.0	89.3
4	91.0	92.5	89.5	54.5	50.0	88.5	77.6
Mean	91.0	91.1	91.3	82.3	79.6	90.4	87.6
CD (5%)		Exposure period: 3.8		Energy treatment: 3.1		Interaction: 7.6	
Root length (cm/seedling)							
1	10.2	11.7	11.6	11.2	10.7	11.0	11.1
2	10.2	11.6	10.7	11.6	10.6	10.8	10.9
3	10.2	11.0	11.9	11.8	9.8	11.0	10.9
4	10.2	11.0	11.0	8.3	9.3	12.8	10.4
Mean	10.2	11.3	11.3	10.7	10.1	11.4	10.8
CD (5%)		Exposure period: NS[2]		Energy treatment: 0.7		Interaction: 1.4	
Shoot length (cm/seedling)							
1	2.27	3.97	3.91	4.41	3.46	3.37	3.57
2	2.27	4.28	3.78	4.32	3.58	3.22	3.58
3	2.27	3.68	4.66	4.00	3.15	3.98	3.62
4	2.27	3.83	4.49	2.81	2.91	4.63	3.32
Mean	2.27	3.94	4.21	3.89	3.28	3.80	3.56
CD (5%)		Exposure period: NS		Energy treatment: 0.42		Interaction: 0.84	
Seedling vigor index							
1	1138	1410	1450	1425	1325	1343	1348
2	1138	1443	1297	1480	1291	1261	1318
3	1138	1299	1513	1412	1087	1344	1299
4	1138	1379	1388	604	608	1532	1108
Mean	1138	1382	1412	1231	1078	1370	1268
CD (5%)		Exposure period: 81		Energy treatment: 99		Interaction 199	

1. MS = milli Tesla magnetic strength; MPE = Metaphysical energy created during BKRYM.
2. NS = Not significant.

energy exposed to seeds for 4 hours, and these two treatment combinations, being at par with metaphysical exposure for 3 hours, magnetic field of 100 mT exposed for 1, 2, and 4 hours, 100 mT exposure for 1 and 4 hours and 200 mT for 1, 2, and 3 hours, caused significant enhancement in shoot length compared to the remaining treatment combinations.

The interaction between energy levels and exposure time with respect to seedling vigor index was significant (Table 2). The exposure of seeds to thought vibration energy (i.e., metaphysical energy) for 4 hours, being at par with magnetic field of 150 mT for 1, 2, and 4 hours, 200 mT for 1, 2, and 3 hours and metaphysical energy for 1 and 3 hours, caused significant enhancement in seedling vigor index compared to the remaining treatment combinations. Metaphysical energy might have changed the molecular structure of the water present in seed (Grad, 1963) and formed beautiful hexagonal crystals (good quality water) leading to better seed germination and growth (Emoto, 2004). Leguminous crops have been found fairly affected by vibrational energies, as observed by Haid and Huprikar (2001) on green pea. They observed that meditation upon the water supplied to green peas affected their germination rate and growth. The power of positive thought/intentional vibrations positively affect plant growth and development (Russell, 1973; Barros, 1977; Benor, 2000).

Field experiment at Karnal

The field experiment on growth and productivity of wheat conducted at Karnal, Haryana indicated that inorganic fertilizers significantly enhanced plant height compared to remaining treatments. Fast and greater availability of applied nutrients might have led to the faster growth of plants. The earheads per m^2 were similar due to the organic + yogic (metaphysical) and inorganic treatments, and both these led to significant enhancement in earheads compared with the remaining treatments (Table 3). The biomass production was significantly greater due to inorganic treatment compared with the remaining treatments, while grain yield was similar due to inorganic and organic + yogic treatments, but significantly more compared with the remaining treatments. The superiority of organic + yogic treatment over organic and control might be due to the positive effect of thought vibration energy created during BKRYM on the moisture (water) present in plant, organic matter, and soil. The quality of life is directly connected to the quality of water. The energy of thought vibration changes the molecular shape of water. Thus water not only has the ability to visually reflect the changes in plants but also reflects the changes in the environment at the molecular level (Sharp, 2014). This action of positively charged water due to formation of intrinsic crystals (good quality) might have enhanced the absorption of nutrients from the soil resulting in better grain formation and its quality. It has also been observed at Dantiwada that blending of metaphysical energy with the organic module enhanced the beneficial soil microbes (see section "Beneficial microbial population in soil") which might have made slow release of nutrients making availability for longer time also be a reason

Results suggest that seed exposure to metaphysical energy or magnetic field energy of 150 mT for 1 to 4 hours is better to obtain higher seed germination percentage of chickpea.

for enhanced grain yield. The test weight of wheat grains was significantly enhanced due to organic + yogic treatment (Table 3) which might be due to more deposition of primary metabolites in the grain.

Field experiments at Dantiwada

In field experiments conducted at SDUAT, Dantiwada, the effect of organic and yogic farming on yield and quality of groundnut and wheat was studied.

Groundnut. Observations on protein and oil content were taken during 2009–10 and 2010–11. During 2009–10, both the OFM modules differed significantly for protein content, and during 2010–11, this difference disappeared. The trend was reversed in the case of oil content (Table 4). The OFM-I and CIM modules caused no significant difference in protein content during both the years, but the oil content differed significantly during 2010–11. It was interesting to note that the OFM-II and CIM treatments did not differ significantly for protein content during both the years, and for oil content during 2009–10, while during 2010–11, the oil content was significantly more due to OFM-II compared with the CIM treatment. In the OFM-II module, the metaphysical energy created during BKRYM was given at various stages of crop growth. The human vibration energy, thoughts, words, ideas, and music affect the molecular structure of water (Emoto, 2005), which is present in plants up to 20–30 per cent. The pure and powerful thought vibration energy might have improved the quality of water present in the plants, and thereby this water might have become instrumental in enhancing the metabolic processes leading to formation of primary metabolite like fat (oil). On

Table 3. Effect of yogic treatment and organics on growth, productivity, and quality of wheat.

Treatment[1]	Earhead length (cm)	Earhead (no./m^2)	Biomass (q/ha)	Grain yield (q/ha)	1000-grain weight (g)	Grain protein (%)
Organic + Yogic	8.8	207	81.31	31.46	44.28	9.13
Organic (FYM)	9.1	167	63.28	22.78	41.70	9.78
Inorganic (NPK)	9.0	219	94.59	31.81	41.74	8.03
Control (no FYM or NPK)	9.1	144	61.89	19.76	40.92	7.75
CD (5%)	NS[2]	14	3.69	2.48	1.49	0.51

1. FYM = Farmyard manure; NPK = Sodium-phosphorus-potassium.
2. NS = Not significant.

Table 4. Quality and yield of groundnut as influenced by the treatments.

Treatment[1]	Year	Content (%)			Yield (kg/ha)	
		Protein	Oil	Pod	Haulm	Oil
OFM-I	2009–10	25.42	48.04	1173	4922	623
	2010–11	23.43	46.19	1134	3484	356
	2011–12	-	-	555	1729	-
OFM-II	2009–10	24.04	48.21	1731	4720	548
	2010–11	24.76	46.92	1153	3836	374
	2011–12	-	-	669	2209	-
CIM	2009–10	24.93	47.68	2717	5131	867
	2010–11	24.24	45.89	1724	5116	559
	2011–12	-	-	826	2542	-
Results[2] compared with CD at $P = 0.05$						
OFM-I vs OFM-II	2009–10	*	NS	NS	NS	NS
	2010–11	NS	*	NS	NS	NS
	2011–12	-	-	*	*	-
OFM-I vs CIM	2009–10	NS	NS	**	NS	**
	2010–11	NS	**	*	**	**
	2011–12	-	-	**	**	-
OFM-II vs CIM	2009–10	NS	NS	**	*	NS
	2010–11	NS	**	*	**	**
	2011–12	-	-	*	*	-

1. OFM-I = Organic farming module-I; OFM-II = Organic farming module + yogic; CIM = Chemical input module.
2. * = Significant; ** = Highly significant; NS = Not significant.

the other hand, the contamination due to chemicals might have led to poor quality water within the plants leading to reduction in primary metabolite.

The yields did not differ in the first and second years among OFM-I and OFM-II, while in the third year, the pod and haulm yield was significantly higher in the case of OFM-II compared with OFM-I. The higher count of soil microbes like *Rhizobium* and phosphate solubilizing bacteria (PSB) due to OFM-II (see section "Beneficial microbial population in soil") might have enhanced the availability of nitrogen and phosphorus for a longer time, leading to more yield

The superiority of organic + yogic treatment over organic and control might be due to the positive effect of thought vibration energy created during BKRYM on the moisture (water) present in plant, organic matter, and soil.

compared to OFM-I. When compared with the CIM module, the yields were significantly more due to CIM compared with OFM-I and OFM-II. The higher yield of pod, haulm, and oil due to CIM module might be because of instant availability and utilization of nutrients by the crop plants from the soil. It is clear from this study that though biomass increased due to CIM module, the quality was maintained only by applying OFM + metaphysical energy. Pure and safe food is the need of our times, and it can be obtained by using pure and powerful metaphysical energy in agriculture.

Wheat. The quality of wheat grains was judged by their starch, gluten content, hardness index, and size. The data presented in Table 5 indicated that the starch content increased significantly due to OFM-II compared with the CIM module. While the wet gluten and hardness of seed was significantly less due to OFM-II compared with the CIM module, the size of seed in terms of its diameter was significantly greater due to OFM-II compared with the OFM-I and CIM modules. Such observations suggest that metaphysical energy leads to bolder, softer and high starch containing wheat grains. The lower wet gluten in wheat grains due to OFM-II module might

Thus water not only has the ability to visually reflect the changes in plants but also reflects the changes in the environment at the molecular level.

be due to diversion of quality water for the formation of other primary metabolites such as starch, as better quality water is more and easily utilizable in the metabolic process, while in the case of the CIM module, the utilization of water for other purposes might have been restricted due to its poor quality than in the OFM + metaphysical energy module. The water retains the changes made in it by metaphysical energy or other bio-factors. It has been well demonstrated that the quality of water improves or deteriorates depending on the intentions given to it, and better-quality water, i.e., forming beautiful hexagonal crystals due to application of vibrational energies leads to better metabolic activities for growth and development of plants (Emoto, 2005; Schulz, 2005; Sharp, 2014). The environment provided by using CIM module might have led to deterioration of the water quality (no or deformed crystal formation) due to nitrate deposition or other factors which in turn could not take part

Table 5. Quality parameters of wheat as influenced by the treatments.

Treatment[1]	Year	Starch (%)	Wet gluten (%)	Hardness index	Diameter (mm)
OFM-I	2010–11	63.98	27.5	80.09	2.85
OFM-II	2010–11	64.17	27.2	75.4	2.96
CIM	2010–11	63.63	28.1	80.1	2.86
CD (5%)		0.40	0.55	2.85	0.09

1. OFM-I = Organic farming module-I; OFM-II = Organic farming module + yogic; CIM = Chemical input module.

in activities within the plants indicating the scientific basis for utilization of pure and powerful thought vibration energy in improving the quality of agricultural produce.

The grain and stover yield of wheat remained unaffected in the first and second years of the study due to the OFM-I and OFM-II modules, but during the third year, the OFM-II module led to significant increase in yields compared with the OFM-I module (Table 6). It is also interesting to note that the yields did not differ statistically between the OFM-II and CIM modules in the third year of the experiment. Grain yield is a function of primary metabolite accumulation in seed. More accumulation of starch and bolder grains might have enhanced yield. It shows that the effect of continuous application of FYM along with metaphysical energy may be a better option in improving yield

Table 6. Grain and stover yield of wheat as influenced by the treatments.

Treatment[1]	Year	Yield (kg/ha)	
		Stover	Grain
OFM-I	2009–10	4524	2248
	2010–11	4113	2611
	2011–12	4902	3222
OFM-II	2009–10	4177	2195
	2010–11	4892	3373
	2011–12	6324	3711
CIM	2009–10	6077	4045
	2010–11	6130	4127
	2011–12	6559	3900
Results[2] compared with CD at P = 0.05			
OFM-I vs OFM-II	2009–10	NS	NS
	2010–11	NS	NS
	2011–12	**	*
OFM-I vs CIM	2009–10	NS	**
	2010–11	**	*
	2011–12	**	**
OFM-II vs CIM	2009–10	*	**
	2010–11	**	*
	2011–12	NS	NS

1. OFM-I = Organic farming module-I; OFM-II = Organic farming module + yogic; CIM = Chemical input module.
2. * = Significant; ** = Highly significant; NS = Not significant.

It is clear from this study that though biomass increased due to CIM module, the quality was maintained only by applying OFM + metaphysical energy. Pure and safe food is the need of our times, and it can be obtained by using pure and powerful metaphysical energy in agriculture.

of wheat as it is input efficient technology. Rondey *et al.* (2003) observed 10% increase in seed yield of lettuce seeds when treated with water energized with thought vibration energy before sowing. Letchoumanane and Gupta (2012) also reported that effect of thought transaction energy enhanced the okra yields by 121% over control. The enhanced population of *Azotobacter* and *Azospirillum* in the soil (Table 7) might have caused the long-term availability of nutrients, mostly nitrogen, to wheat plants, thereby enhancing the yield as nitrogen is an important element leading to better growth and yield of crop.

Beneficial microbial population in soil

At Dantiwada, the observations on beneficial soil microbial population buildup under groundnut–wheat rotation before sowing, at flowering, and after harvest of the wheat crop at the end of rotation indicated that during *kharif* (groundnut crop) and *rabi* (wheat crop), the highest microbial population (*Rhizobium, Azotobacter, Azospirillum*) and PSB was under OFM-II during 2010–11. CIM led to the least population of beneficial microbial populations at all the stages compared with the organic modules (Table 7). This observation suggests that organic farming blended with metaphysical energy not only enhances the germination, growth, and yield of the crops but also leads to better soil health in terms of high soil microbial buildup aiming metaphysical energy application to soil microbes. Distant healing with the power of metaphysical energy has been found to cause significant effects in enhancing or retarding the growth of bacteria and yeasts (Haraldsson and Thorsteinsson, 1973; Leikam, 1981; Nash, 1982; Rauscher and Rubik, 1983). Nash (1984) explored the effects of distant healing on bacteria that mutate between two forms – 'lac negative' and 'lac positive' – showing that metaphysical energy could selectively increase either form. The effects of mental intent on the motility of algae have been found to cause highly significant effects (Pleass and Dey, 1990). Backster (2003) observed that human thoughts are interconnected with living organisms in significant ways. Treating the soil culture with high frequency sonic vibrations for 4 minutes showed maximum number of bacteria, actinomycetes, and fungi (Stevenson, 1958). On the basis of the kinesiological scale, the vibration frequency of feelings and emotions (thoughts) at the state of peace, bliss, enlightenment, and ineffability has been observed to be 600–1000 Hz, which transcend duality (Maxey, 1977; Hawkins, 2002). Thought energy has a very high frequency of vibration which might have led to enhancement in soil microbial population in the present study.

Table 7. Beneficial microbial population in wheat.[1]

Treatment[2]	Year	*Rhizobium*			*Azotobacter*			*Azospirillum*			PSB		
		BS	FI	AH	BS	FI	AH	BS	FI	AH	BS	FI	AH
OFM-I	2009–10	76	206	159	138	257	208	86	195	153	120	241	197
	2010–11	92	243	163	148	269	239	104	221	181	139	284	219
OFM-II	2009–10	83	218	172	146	268	217	92	203	168	133	249	205
	2010–11	94	239	171	151	276	233	101	219	177	145	269	221
CIM	2009–10	68	183	117	126	205	156	61	165	123	103	213	175
	2010–11	82	194	124	132	217	172	97	174	142	112	219	186

1. Population = Count x 104 cfu/g soil (cfu = colony forming units).
   PSB = Phosphate solubilizing bacteria; BS = Before sowing; FI = Flowering initiation; AH = After harvest.
2. OFM-I = Organic farming module-I; OFM-II = Organic farming module + yogic; CIM = Chemical input module.

Conclusion

If we know the basics of science, such as all matter is different and all matter is made up of energy and that energy is basically vibrations, then it should not be too difficult to understand that metaphysical energy works the same way. The review done on various aspects of crops at different places indicated that the metaphysical energy created during BKRYM and applied to seeds, field crops, or water used for these purposes led to enhanced seed germination and vigor, and quality of crops. While keeping pace with chemical farming, the extensive use of metaphysical energy may lead to higher and pure crop produce in the future. Thus metaphysical energy has been found to play a vital role in enhancing all the stages of crop growth, i.e., from seed germination to final yield. Use of this energy can be successful, as it is a nonmonetary and powerful input as well as being helpful in improving the society. Thus the power of metaphysical energy created during Raja yoga meditation has been found to play

The grain and stover yield of wheat remained unaffected in the first and second years of the study due to the OFM-I and OFM-II modules, but during the third year, the OFM-II module led to significant increase in yields compared with the OFM-I module.

At Dantiwada, the observations on beneficial soil microbial population buildup under groundnut–wheat rotation before sowing, at flowering, and after harvest of the wheat crop at the end of rotation indicated that during* kharif *(groundnut crop) and* rabi *(wheat crop), the highest microbial population* (Rhizobium, Azotobacter, Azospirillum *and PSB) was under OFM-II during 2010–11.

a vital role in transforming agriculture as well as human health. All efforts need to be made to obtain such effects through the use of the metaphysical energy produced through Raja yoga meditation. This will not only transform agriculture but also facilitate transforming farming families and other human beings.

Endnote

Bhagavad Gita, verse 7.04: *Bhoomiraapo analo vaayuhu kham mano buddhireva cha, ahankaara iteeyam me bhinna prakritirashtadhaa.*

Meaning: The mind, intellect, ego, ether, air, fire, water, and earth are the eightfold divisions of My material Nature, Prakriti.

Interpretation: Raja yogis influence the five elements to transform the normal land into a fertile one required for plants under *Yogik Kheti* (yogic farming).

Bhagavad Gita, verse 7.05: *Apareyamitastvanyaam prakritim viddhi me paraam, jeevabhootaam mahaabaaho yayedam dhaaryate jagat.*

Meaning: Prakriti is My lower form of energy. My other higher energy is the *Purusha* (soul) by which this entire universe is sustained, O Arjuna!

Metaphysical energy created during BKRYM and applied to seeds, field crops, or water used for these purposes led to enhanced seed germination and vigor, and quality of crops.

Interpretation: Raja yogis invoke the higher energy or Supreme energy to transform the quality of the soil (earth) required for the plants under yogic farming, without the use of any chemical fertilizers, pesticides, etc. All the five elements will act favorably as the blessings from the controller of these elements are invoked.

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