Applied BIODYNAMICS©

Summer, 2002 *Newsletter of the Josephine Porter Institute • Woolwine, Virginia* **Issue No. 37**

Yarrow is indeed a miraculous creation. No doubt every plant is so; but if you afterwards look at any other plant, you will take it to heart all the more, what a marvel this yarrow is.

Rudolf Steiner, *Agriculture* (Adams translation), p. 91

Notes

More than twelve months in the making, the yarrow preparation, and its transformation is a process that involves every season. It reminds us of the subtle yet always influential cosmic and planetary forces that work within Nature, which goes into the making of the biodynamic preparations. Featured in this issue, "How to Make the Yarrow Preparation", and for the deeper meaning of yarrow, Hugh Courtney offers "*Achillea millefolium* Esoterica".

Gaining self-sufficiency is a learning experience which Christy Korrow shares in her article, "Prep Making Efforts at Dogwood Spring Farm". Christy wrote this in response to Hugh's article, "Michaelmas 2000 Impulse", which was published last year.

Also, the concise and colorful book, *Gardening For Life – The Biodynamic Way* by Maria Thun is jointly reviewed by Alice Petty, Doris Petty and Corry Watts.

Last but not least, we wish Hugh a very happy 70th birthday in July.

Patricia Smith, Editor

Front cover: Occasionally, one comes upon a flower cluster such as this, revealing yarrow's influence by the planet Venus, which rules matters of the heart. Photo © Patricia Smith

Please Write

We welcome your articles, letters, book reviews and shared experiences of observations in biodynamics. Send to: The Editor – *Applied Biodynamics*, P. O. Box 133, Woolwine, VA 24185

Biodynamic Preparations Legend

BD #500 – Horn Manure
BD #501 – Horn Silica

BD #502 – Yarrow
BD #503 – Chamomile
BD #504 – Stinging Nettle
BD #505 – Oak Bark
BD #506 – Dandelion
BD #507 – Valerian

} Compost Preparations

BD #508 – Horsetail (*Equisetum arvense*)

Applied Biodynamics

Applied Biodynamics is a quarterly publication of the Josephine Porter Institute for Applied Bio-Dynamics Inc. (JPI). The subscription price of $30.00 per year helps support JPI research and development. Back issues are $7.50 each.

The Editor, *Applied Biodynamics*
P.O. Box 133
Woolwine, VA 24185, U.S.A.
Phone: (276)930-2463
Fax: (276)930-2475

Mission

The Josephine Porter Institute for Applied Bio-Dynamics Inc. (JPI), was founded to produce quality biodynamic agricultural preparations based on the spiritual-scientific research of Rudolf Steiner.

It serves as a living memorial to Josephine Porter, a pioneer for this work in America.

The mission of JPI also includes education and research in biodynamic agriculture. JPI undertakes these tasks so that the earth may be healed.

Thanks for the Dandelions

The biodynamic preparations made at JPI could not happen without the help of our friends and supporters in harvesting dandelions for BD #506. *It's great to hear that harvesting is such a wonderful experience for some of our pickers.*

Dear Friends,
While attending a biodynamic gardening workshop with Günther Hauk at the River Valley School (Upper Black Eddy, PA) in April, I learned that the [Josephine] Porter Institute has an ongoing need for dandelions.

These have been gathered for your use by the third graders at the Susquehanna Waldorf School in Marietta, PA. As part of their curriculum, they spend each Friday helping out at Simple Gifts Organic Farm and CSA in Washington Boro, PA, where the 'messengers from heaven', as Günther described the dandelions, have gathered en masse around the perimeters of the planting beds. The children delighted in picking ones in the "ready" stage of development, that still had the visible "bulls-eye" centers, and Farmer John sure was grateful as well! It is our pleasure to present them to you.

Sincerely,
Becky White
Garden Committee, Susquehanna Waldorf School

Patricia Smith

How to Make the Yarrow Preparation (BD #502)

These are the step-by-step procedures we follow to make the yarrow preparation at the Josephine Porter Institute here in Woolwine, VA.

Yarrow (*Achillea millefolium*) is located in fields, meadows and roadsides growing one to three feet high with finely dissected leaves and disks of whitish blossoms on sturdy, stiff stems.

TIME OF HARVEST: Late spring to early summer, after the flowers have bloomed for some time. Flower heads have a relatively long span of time from initial bloom to fully ripe seed formation.

BLOSSOMS TO HARVEST: Look for the flower heads that begin to protrude, losing their flat, disc-like appearance and the petals starting to turn downward. Harvest yarrow using clippers, or a sharp knife or scissors. Make sure you take a generous amount of stem, at least three inches. This is for ease of handling when later clipping the tiny florets from the stem.

Yarrow flowers do not contain a great deal of moisture so you can cut them right away for use in the BD #502 preparation, or leave them out on racks, screens or an open area to dry further for a few days or weeks. Once dried, they can be stored in paper grocery bags for up to several years, but it is best to use them within a year's time. Fresh yarrow for making BD #502 is the ideal situation if you have enough of a supply.

Fig. 1. Achillea millefolium is known by its more common name, yarrow. Other common names include: noble yarrow, milfoil, nosebleed, sanguinary, soldier's woundwort and thousandleaf. Photo © JPI Staff

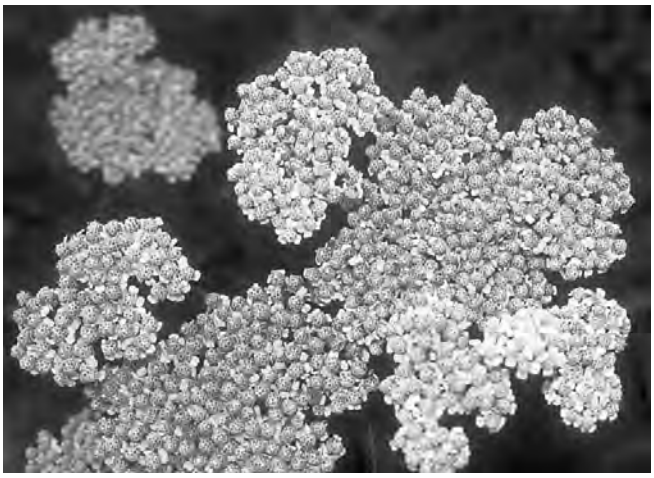


Fig. 2. These yarrow blossoms with flower heads protruding and petals turning downward, are ready to be harvested. Photo © JPI Staff

Using small hand scissors, a sharp bladed pocket-knife, clippers, or even a sturdy thumbnail, cut the individual flowers, removing them from the umbel structure of stems. Our preference at JPI is to have virtually stem-free florets to use in stuffing the bladders. This is most important because the stiff coarse stems, if left attached when being stuffed into the sheath, can puncture the walls of the stag bladder. Reserve the stems and leaves for later use in making a 'tea' for moistening the blossoms and softening the stag bladders prior to stuffing.

Make sure to cut more than enough blossoms. Lots and lots of yarrow blossoms are required to fill even a small stag bladder. When you have finished clipping, the bowl of tiny florets will vaguely resemble a bowl of rice or other grain.

Fig. 3. Cut off the stems completely from the individual flowers to prevent the bladder from being punctured. Photo © Patricia Smith

Fig. 4. Make sure a sufficient supply of yarrow blossoms have been clipped before starting to stuff the stag bladder. Photo © JPI Staff

The stag bladder

Unless you are a deer hunter, or know someone who is, procuring a stag bladder can be a challenge, but not impossible. Check with hunters in your locality to see if a stag bladder could be saved from the local deer or elk population harvest in the fall. It may even be possible to obtain the cooperation of a local game warden who will allow you to harvest bladders from fresh road kill. If you find someone who is willing to help, ask if they will reserve the bladder with the testes and male organ intact to ensure that the bladder is from a stag. Also, if possible, ask the hunter to refrain from rinsing the bladder out, leaving the urine within. This urine can be reserved and stored in a glass container for later use to rinse the bladder before stuffing with yarrow. Once you are in possession of a bladder you can choose to work with it fresh or freeze it for future use. If you choose to freeze it, make sure water covers the entire bladder. Do not attempt to vacuum seal the bladder; it becomes tough from lack of moisture and is difficult to use.

Preparing for use as a sheath

Thaw the frozen stag bladder in water. Once thawed, place the bladder on a small cutting board. Smooth out the bladder and testes being careful not to puncture or cut into the tissue. With a knife, remove part of the male organ, leaving about one inch, exposing the urinary tract in the center.

Using a small air pump with a needle attachment, insert this deep enough into the urinary tract opening so that the end of the needle enters the bladder itself. Cut a five-inch piece of yarn, tie and secure a single knot around the tissue that surrounds the needle attachment. At this point, it works best as a two-person operation. Although it is possible for one person to do this, it involves some difficulty. As the first person keeps the rather slippery tissue tightly over

Fig. 5. With an air pump, inflate bladder and use fingers to secure it over the needle attachment. Photo © Patricia Smith

the needle with the yarn tied loosely around the opening of the bladder but behind the testes, the second person uses the small air pump to inflate the bladder. If you encounter a bladder that has a puncture or air leak, all is not lost. See the sidebar below if this situation arises.

Depending upon the size of the bladder, it can expand from two to four inches across. Once the bladder is expanded into a sizable 'balloon', the second person is now ready to tie off the opening. The first person holds the bladder in place being careful not to let any of the air escape while the second person ties the yarn into a secure knot at the opening. The first person removes the needle from the bladder as the knot in the yarn is tightened down.

How to inflate a punctured deer bladder

Insert a wooden unsharpened pencil that has been lightly coated with vegetable oil into the opening of an un-inflated balloon. Slide the ballon into the bladder through the urinary tract opening. Remove the pencil and insert the needle attachment of the air pump into the neck of the balloon. Inflate as directed beginning in paragraph two of "Preparing the Stag Bladder for Use as a Sheath". These punctured bladders are mainly reserved for use in repairing the stuffed stag bladders in the fall. However, if no other bladders are available, the balloon-inflated bladders can also serve as a suitable sheath for the yarrow preparation. See the section, "Ready for Fall" on page 7 for details.

Fig. 6. An inflated stag bladder dries with the testes intact. It usually takes twelve hours for the sheath to dry before stuffing with yarrow blossoms. Photo © Patricia Smith

Drying the inflated stag bladder

Once the knot is securely in place, an additional piece of string about ten inches long, is tied around the opening. Tie and suspend the inflated bladder from a pole or line and leave to dry thoroughly for perhaps twelve hours or so, depending upon temperature and humidity. If drying several bladders, make sure they are not touching each other as they can easily become glued together and damage to a bladder may occur when separating them.

After drying, if the bladder is not going to be used right away, store loosely in a sealable plastic or paper grocery bag in the freezer. In this way, it is kept fresh and away from animals and insects, particularly flies which seem to prefer the bladder as a prime site for laying eggs which quickly hatch into voracious larvae. Due to its fragile nature, make sure nothing is placed on top of the inflated bladder. It is best to

use the deer bladder within one year, but it can be stored in the freezer for up to three years.

TIME OF YEAR TO MAKE THE YARROW PREPARATION (STUFFING THE STAG BLADDER): Late June to mid-July.

Preparing to stuff the stag bladder

To make the tea for the BD #502 preparation, simmer water in a large saucepan or pot, adding several handfuls of yarrow stems and leaves. Simmer for approximately twenty minutes.

In a bowl filled with clipped yarrow blossoms, add the simmered yarrow tea, to which a small amount of cool water has been added to avoid scalding the blossoms. Sufficient liquid should be used to lightly moisten the blossoms avoiding making them soggy or dripping wet. A good rule of thumb is to squeeze a handful of the moistened yarrow blossoms; if a great deal of water can be squeezed out, it is too wet, if only a drop or two, it is just right.

Whether freshly dried or stored in the freezer dried, the bladder needs to be rehydrated to become soft and pliable enough for stuffing. To soften, place the dried deer bladder in a small bowl of warm water blended with yarrow tea. Since the bladder is like a balloon and quite buoyant, turn it several times in the warm liquid. It should be pliable in about five to ten minutes. At this time the interior of the bladder can be rinsed with any reserved deer urine.

Stuffing the stag bladder with yarrow

After the bladder is softened, make a vertical one to two-inch slit with scissors near the site of the knot. Slide a sausage-stuffing funnel that has had an inch cut off the narrow end into the opening of the bladder and start to feed the moistened yarrow blossoms through. A wooden dowel rod is helpful for this purpose to push the moistened yarrow along. Once the sheath is about half full, start to firmly press

Fig. 7. Soak the inflated stag bladder in warm water blended with yarrow tea for about five to ten minutes to soften before stuffing. Photo © JPI Staff

Fig. 8. A little further down from the area that was tied off, pierce the bladder with scissors and then cut a one-inch opening. This will allow enough space for the moistened yarrow blossoms to be filled in whether using fingers or a funnel. Photo © Patricia Smith

down the blossoms with the use of the dowel rod or thumb and fingers. This is important because if the sheath is loosely packed it will contain too much air, causing the yarrow blossoms to dry out, thereby halting the transformation process. When the sheath is nearly filled, remove the funnel and stuff the rest by hand. You know you are finished stuffing when you can press your finger on the outside of the sheath and it will not make a depression. The sheath should be as firm a consistency as that of a softball. While some European BD practitioners stuff bladders quite loosely and with substantial stem material attached to the flower, the practice at JPI is to stuff as tightly as possible. You probably will be amazed at how many blossoms it takes to fill the sheath to make the yarrow preparation.

Once filled, the sheath opening is ready to be sewn up. Using heavy-duty white cotton thread and a large needle, double thread the needle and sew up the opening using a hem, blanket or whip stitch or whatever stitch you know that can do the job. Squeeze the two sides of the opening together as you stitch to complete the closure.

The sewing completed, the yarrow preparation receives a protective covering of cheesecloth before being hung outside. Fully cover the bladder with the cheesecloth as the covering is necessary to shield the bladder from splitting and cracking in the summer sun. It may provide protection from birds and insects as well, although we have never experienced

Fig. 9. Once the stuffing is nearly completed, remove the funnel and fill the rest by hand. Photo © JPI Staff

Fig. 10. After fully stuffing, pinch the sides of the bladder together to secure a tight stitch. Photo © Patricia Smith

any damage from birds here in Woolwine. You can purchase cheesecloth at the hardware or sewing store in a package of about two square yards. To form a cover, lay out a piece of cheesecloth, a layer thick. This should measure about eighteen inches square and should be sufficient to cover most bladders. Place the yarrow preparation on the cheesecloth.

Fig. 11. Sew up the stag bladder using a blanket stitch or a similar reinforcing stitch. Some practitioners prefer to wear latex gloves since handling the bladder can leave a distinct odor on hands for a few hours. Photo © Patricia Smith

When cutting the cheesecloth, allow extra material for the entire sheath to be covered and for tying knots. Bring both sides of the cheesecloth together and make a double knot directly over the top of the yarrow filled bladder to fit snugly, so it won't fall out. With the extra cheesecloth (you should have at least four to six inches left on each side), make another double knot at the top to form at least a four-inch loop.

Summer exposure

The covered yarrow preparation is ready to hang outside. Find a location high enough from the ground that animals will not be able to reach it. Also, make sure there is enough space to hang it away from a wall, tree branch or tree trunk so that the yarrow preparation will not crash against it during high winds. Once you have chosen an appropriate location, secure it to a pole, hook or branch so it cannot fall or blow away. The yarrow preparation hangs outdoors from early summer to fall.

Ready for fall

After the fall equinox, in late September or October, take down the yarrow preparation and remove the cheesecloth.

Fig. 12. Finish securing the second and final knot to fit snugly so the yarrow filled bladder will not fall out of the cheesecloth. Photo © Patricia Smith

Examine the sheath for any rips or tears. If there is a rip, you can use a spare stag bladder (balloon-inflated) saved for such repairs (see sidebar on p. 5). Soften the spare bladder in warm water.

Once softened, make a small vertical slit to remove the balloon carefully; it should come out of the bladder pretty easily. Once removed, make the vertical slit longer in order to fit over/around the yarrow preparation in need of a repair. It should fit as snugly as possible. Sometimes this is not possible and the best fit with the spare materials available can look wrinkled and baggy over the yarrow preparation. This is acceptable since the main objective is to cover the tear. You can further smooth out the wrinkles by wetting your fingers with water and applying this to the loose fitting bladder. If there isn't a spare stag bladder for repairs, simply sew up the torn area of the sheath with a gentle stitch such as a blanket stitch or hemstitch.

Burying the yarrow preparation

The yarrow preparation is ready to go into the ground, but here at JPI we prefer that it not go in 'as is'. For ease of recovery and for protection, it must be enclosed with fine mesh copper screening, which can be found at hardware stores. Fiberglass screening is an alternative but never use hardware cloth (galvanized steel) as the Mars/iron relationship is opposite in polarity to the Venus/copper relationship. Once the yarrow preparation is enclosed in the screening material, fold the screen over at the edges and staple about every three inches along the outer edge. Without the screen, the yarrow preparation can be eaten up by underground critters such as insects and moles, or even be of interest to foxes and dogs. Locate the pit in an area with good drainage and far enough away from tree roots. To prepare the BD #502 pit, dig to a depth of one to two feet deep and at least one to two feet wide. Bury the yarrow preparation in the late afternoon around dusk. Bricks may also be used to cover the bladders and to protect them from a too enthusiastically wielded shovel. Mark the area with a large metal or wooden stake. This is very important because without a marker, it becomes quite difficult to find later.

Fig. 13. From early summer to fall, the yarrow preparation hangs outdoors. Photo © JPI Staff

After burying the yarrow preparation, one might choose to meditate and pray on the purpose of this preparation before leaving the site.

Digging up the yarrow preparation

The yarrow preparation stays in the ground through the remainder of the fall, winter, spring and first few days of

summer. After St. John's Day (June 24), the yarrow preparation should be finished and ready to dig out of the pit. Some practitioners choose to dig up the yarrow as early as Easter. However, since this is substantially less than the year that Rudolf Steiner indicated for the yarrow to spend in the bladder, here at JPI we focus on St. John's Day for digging them up.

Locate the area where you buried the BD #502. With a shovel, dig the soil out of the pit, being careful not to dig into the yarrow preparation. When you start to see the copper screen or protective bricks, stop digging and start brushing away the soil by hand. Gently pull the screen out of the pit, keeping it horizontal so none of the contents roll around or break apart, and place the yarrow filled bladders into a shallow tray. Remove the staples from the copper screen and carefully remove the finished yarrow preparation. The bladder should be a visibly thinner membrane and the yarrow should be completely transformed: light brown in color and an almost feathery light texture. Peel away the sheath, gently scraping the yarrow clinging to the sides with a pocket or butter knife or similar instrument. Screen the yarrow preparation through a ¼ inch mesh screen.

Fig. 14. In the summer, carefully dig up the yarrow stuffed bladders enclosed in copper screening. Photo © JPI Staff

Storage

After screening, the finished yarrow preparation needs to be properly stored. Conditions are very important. Although naturally low in moisture, the yarrow preparation must not dry out. Store in a glazed ceramic crock, glass or unglazed clay vessel preferably underground or in cool, dark conditions surrounding the crock with peat moss. Also, allow for the preparation to 'breathe', using a loose fitting lid such as natural stone, wood or glass. See JPI's information sheet, "Storing Biodynamic Preparations" for further details.

Uses

Although the yarrow prep is principally used for inserting into a compost pile, it is also used as a seed soak for rye and other grasses. Read the following article in this issue, "*Achillea millefolium* Esoterica" for more information on the yarrow preparation.

Hugh J. Courtney

Achillea millefolium Esoterica

If we are to achieve Rudolf Steiner's intentions as far as biodynamic agriculture is concerned, it is not enough that we know how to make the yarrow preparation, and occasionally use it to make compost.[1] We must exert an effort to grasp what it is that lives in this preparation and how it exerts its influence. In other words, we must do our utmost to understand the preparations, "not as substances, but as forces."

Let us revisit what Steiner says about the compost preparations as a totality. In speaking of a further treatment of the manure, he says, "And the point is not merely to add *substances* to it, with the idea that it needs such and such substances so as to give them to the plants. No, the point is that we should add *living forces* to it."[2] To approach agriculture from the customary chemical or organic point of view of building our soils by virtue of supplying all the substances deemed necessary is still insufficient, and as Steiner continues, "it would still be of no use for plant-growth, unless by a proper manuring process we endowed the plant itself with the power to receive into its body the influences which the soil contains."[3] Note here that it is the imponderable quality of 'influences' that is being received from the soil by the plants, rather than merely having the plant be able "to absorb what the soil offered," which tends to lend itself to a characteristically materialistic or substance point of view.[4] The purpose of the compost preparations in Steiner's words, was "giving the manure the right degree of vitality and the right consistency."[5] By such a gift, according to Steiner, we "enable it (the manure) to retain of its own accord the proper amount of nitrogen and other substances

that it needs in order to bring vitality to the soil."[6] Once again note that we are bringing another imponderable, "vitality" into our considerations rather than the material substance of the chemical or organic approach.

At the point when Steiner begins to introduce the first of the six compost preparations, yarrow (*Achillea millefolium*), he expresses the concern that "we need to make sure that the major elements of the organic realm – carbon, hydrogen, oxygen, nitrogen, and sulfur – can come together in the right way with other substances, with potash salts, for instance."[7] Steiner then goes on to describe the role of potash salts in the following words, "It is generally known that plants require a certain amount of potash salts for growth, and that potash salts, or potash in general, tends to restrict the growth process to those parts of the plant that usually become the solid framework, that is, to the stems and stem-like parts."[8] This last statement is the general agricultural chemical and organic view of the importance of potassium in plant growth. However, Steiner then makes another statement that takes us beyond this "structural" or material view of the role of potash. He goes on to state, "But in the context of the interaction between the plant and the soil, it is important to transform this potash so that it relates itself properly to the forming of the proteinaceous material that constitutes the actual body of the plant."[9] Here we have a very important distinction between the 'solid framework' of the plant and the 'proteinaceous material' that forms the body of the plant. In the solid framework, we can recognize cellulose (see sidebar 1) as one major product due to the presence of potash salts. Since potassium is not a chemical component of cellulose, we may assume that it at least serves a role as a catalyst in cellulose production. However, when Steiner speaks of the role of potash in the formation of proteinaceous material (see sidebar 2), he points to the importance of 'transforming' the potash so that it can play a role in forming protein. In essence, potassium is still playing the role of a catalyst but at a different level of activity. A picture that comes to mind in digesting this contrast between cellulose and protein and the possible role played by potassium in both cases, is that in cellulose production, potassium is acting more in the earthly (material substance) realm, whereas in protein formation, potassium is functioning at a cosmic (living/spiritual) level. It may be that the yarrow preparation serves to enhance potassium's ability to function more effectively at this second level. In this distinction between two possible levels of functioning, we begin to have a glimpse of the potassium 'process' as opposed to the mere chemical substance of potassium or potash salts.

There is another chemical element that Steiner speaks of when introducing us to this first of the six compost preparations. He describes yarrow as "an ideal model in bringing sulfur into relationship with the other plant substances. You might say that in yarrow as in no other plant, the nature spirits reach the height of perfection in their use of sulfur."[10] (It is noteworthy that this is the only reference to nature spirits made by Steiner anywhere within the eight lectures of the Agriculture Course.) Perhaps by virtue of this perfection, yarrow achieves the ability as Steiner says, ". . . to correct any weakness of the astral body" within the animal or human organism.[11] In the plant kingdom, the yarrow preparation works through the manure or compost being applied to the soil in such a way that it can "enliven the soil so that it can absorb and retain extremely fine doses of silicic acid and lead and so on that come toward the Earth."[12] Here we have substances being absorbed whose origin is from the cosmos beyond the earth. This absorption of such substances through the "enlivening and refreshing" yarrow preparation enables the manure as Steiner says, "to counteract the unavoidable exploitation of the land that comes about through raising crops."[13] It may well be that these extremely fine doses of substances of cosmic origin are unable to retain the cosmic forces once they impact earthly soil unless the energies of the yarrow preparation are there to aid them in retaining their cosmic connection.

There is much more to be said about the deeper mean-

Sidebar 1
Cellulose – A complex carbohydrate, $(C_6H_{10}O_5)_n$, that is composed of glucose units, forms the main constituent of the cell wall in most plants.

Sidebar 2:
1) Protein – Any of a group of complex organic macromolecules that contain carbon, hydrogen, oxygen, nitrogen, and usually sulfur and are composed of one or more chains of amino acids. Proteins are fundamental components of all living cells and include many substances, such as enzymes, hormones, and antibodies, that are necessary for the proper functioning of an organism. They are essential in the diet of animals for the growth and repair of tissue and can be obtained from foods such as meat, fish, eggs, milk, and legumes.
2) Amino acids – An organic compound containing both an amino group (NH_2) and a carboxylic group (COOH), especially any of the twenty compounds that have the basic formula $NH_2CHRCOOH$, and that link together by peptide bonds to form proteins.

ing behind this preparation and its stag bladder sheath as well as the difference between cow horns and antlers. Among those who have tried to fathom this deeper meaning, the reader is directed to the following titles: *Agriculture of Tomorrow* by Eugen and Lilly Kolisko, which identifies the connection between yarrow and the planet Venus amongst other things; *A New Zoology* by Herman Popplebaum, which looks at the deer family; *The Working of the Planets and the Life Processes in Man and Earth* by C. B. J. Lievegoed, which again correlates the various preparations with planetary and other energies; *In Partnership with Nature* by Jochen Bockemuhl, which is a botanist's view of the preparation plants; and *Earth and Man* by Karl Konig, which examines the preparations in the light of embryology as well as from other useful directions. Regrettably, all but the last two titles are currently out of print. At another time, we hope to continue this presentation of the hidden meaning involved with the yarrow preparation, and at that time we will include pertinent passages from the out of print authors to help the reader come to grips with all that is associated with the yarrow preparation.

Notes

1. Rudolf Steiner, *Agriculture* (London: Bio-Dynamic Agricultural Association, 1984), 7.
2. Ibid., 90.
3. Ibid.
4. Rudolf Steiner, *Spiritual Foundations for the Renewal of Agriculture* (Kimberton, PA: Bio-Dynamic Farming and Gardening Association, 1993), 93.
5. Ibid.
6. Ibid.
7. Ibid., 94
8. Ibid.
9. Ibid.
10. Ibid.
11. Ibid., 95
12. Ibid.
13. Ibid.

Christy Korrow

Prep Making Efforts at Dogwood Spring Farm

The following is a response to Hugh Courtney's "Michaelmas 2000 Impulse".

For the past several years I have buried horns for horn manure, horn silica, and occasionally made the valerian and nettle preparations. All other preparations have been purchased from JPI. In winter of 1999–2000, my desire to make all of the preparations coincided with Hugh Courtney's article, "The Michaelmas 2000 Impulse – A Personal Experience" (*Applied Biodynamics,* Winter 2000/2001, Issue No. 31). I made a commitment to myself to have all of the compost preparations buried on our farm. The goal was not to think so much in terms of regional distribution, but more so to take responsibility to produce preparations for the needs of our farm, and to start getting experience in the annual prep making process.

We have a family milk cow and calf, which provide us with an ample amount of quality manure for BD #500. Hugh Courtney arranged for a shipment of horns to another biodynamic farm in the state. My daughters and I drove three hours each way and came home with a pick-up load full of horns. We are now maintaining a stock of a few hundred horns, with forty-five horns buried last fall. The rest of the horns hang in feed sacks from a board that sits high above the cows' saltbox.

Quartz crystals collected from the property now provide the raw material for BD #501. Two horns of powdered crystals will last the farm for a few years, with some left over to distribute and share.

All plant materials for the prep making process are being grown on the farm in various quantities. Nettle is plentiful, as is valerian. Dandelions are quite prolific. White oaks are in the woods.

On the other hand, yarrow and chamomile are grown only in small quantities. We will most likely never grow enough chamomile to make the quantities of BD #503 that we would like, so we harvest and dry the small amount that we can, and mix it in with chamomile purchased from Resting in the River, an herb company in New Mexico where they use the biodynamic preps. Yarrow is also purchased from Resting in the River since the yarrow grows spotty throughout our fields. But it is a realistic goal to think in terms of planting and cultivating more yarrow in the gardens to produce a sufficient quantity here on the farm.

Next were animal sheaths; where to get them? Stag bladders are convenient to come by, as deer are in abundance in

our area, and each year a neighbor hunts and kills a stag on our farm. For cow sheaths, I turned to a neighboring Demeter-certified biodynamic farmer who keeps thirty or so cows. He brought back the mesentery, intestines and two skulls from the slaughterhouse. Last fall I drove out to his farm with the yarrow, chamomile and dandelion. Some friends gathered, white oak bark was ground, and the day was spent stuffing and sewing (With back issues of *Applied Biodynamics* to provide guidance!). One of the biggest challenges was knowing whether or not the mesentery was properly identified. At the end of the day we each had dandelion, oak bark and chamomile preps to bury on our farms.

Now it is spring of 2002. Over the last year we have begun to compile all of the bits and pieces that need to be in place for organized annual prep production. We will not be buying any of the biodynamic field sprays or compost preparations from JPI. This year I will make barrel compost using all of our own compost preparations.

Projects for the future include purchasing of additional crocks, the completion of a root cellar for proper prep storage, and as was mentioned above, a yarrow planting.

Even though it was not intended to produce preps to distribute, we have ended up with a small surplus. Our farm is home to a non-profit agricultural-based educational effort, Rural Center for Responsible Living. This organization has received funding from the Rudolf Steiner Foundation's Fund for New Initiatives to conduct spring gardening classes. Included with the class fee, each participant took home one unit of 500 and 501. In addition to receiving the preparations, each person received a JPI catalog for future prep orders.

Now that we are approaching self-sufficiency in regards to the biodynamic preparations, has this eliminated our need to have a relationship with JPI? Actually quite the opposite, we depend on JPI for their extensive prep-making knowledge and expertise, for details relating to going to the slaughterhouse, how to dress out a skull, what qualities to look for in the finished preps, when to bury and lift preps, and sourcing horns and crocks. We order books and read *Applied Biodynamics*. Reprints of JPI preparation use instruction sheets are given out when preps are distributed. We refer people who need preps to JPI (and hope they will also attend workshops there in the future).

Most importantly, we now have a deepened respect for the work that takes place at JPI, not only in a spiritual sense based on the impact the preparations work has on etheric levels, but also for the practical side of harvesting plant materials, sourcing animal sheaths, producing quality preps consistently, storing them properly and also for the gifts they offer of providing education on prep making and access to quality preps. When we think of how many people have been blessed with eating the food grown with preps produced at JPI, we realize that this organization has had a direct impact on bridging the gap between thinking about spirituality and bringing it to life through conscious willing that Steiner spoke about so many years ago.

I believe that as Hugh Courtney transitions out of the Executive Director position at JPI, he can feel confident that the efforts he has initiated in Josephine Porter's name are being perpetuated by others and will continue to be a central force leading biodynamics forward throughout North America and the world.

Christy Korrow and her family have a biodynamic farm in Kentucky.

Book Review

Gardening for Life – The Biodynamic Way

by Maria Thun

Reviewed by Alice Petty, Doris Petty and Corry Watts

There is a wealth of information that lies within the pages of this book, in print, photographic and illustrated form. All aspects come together beautifully to guide our impulses and pass on to us the knowledge to formulate our own gardening plan.

In the foreword Maria Thun states, "Long years of research have enabled us to deepen, expand and refine our understanding of cosmic influences on plant growth, an aspect which can be of great use to the practical gardener." Hence it is revealed to us what her many years of research has recognized as the best methods for attaining healthy and enlivened plants and soil 'the biodynamic way'.

She helps us achieve an understanding of the "zodiac and element influences" on the many aspects of the soil and plant life. These influences are observed in sowing, transplanting, cultivating, prep spraying and even harvesting of garden plants, as well as fruit growth and propagation.

The soil is examined by its inorganic substances-clay; and organic components brought to the clay by way of compost. Many different mediums for composting are

covered, as are ways for its making and the planetary influences upon it.

There are many references to using herb extracts such as nettle and plant manures to combat various pests and fungal problems, and also for nourishing other plants. For instance, Maria Thun states, "The nettle can also be used to counteract pests and encourage growth". In reference to this she states how, "Potatoes are extremely grateful for this treatment." I envision potato plants all joyously vibrating in harmony after being sprayed with this extract.

The formulations, methods for stirring, and applications of biodynamic preparations 500 and 501, and 'the cowpat preparation' (which we refer to as Maria Thun's Barrel Compost) are described and wonderfully illustrated.

Other elements needed to create a healthy plant are also covered: rock meal, green manuring, crop rotation and watering. Included in this bounty of information are plant observations and an example of a five-year rotational cycle for the garden, just to name a few.

A number of solutions are put forth to help eliminate weed problems: the best days for cultivating to force weed seed germination; when to cultivate to keep them from germinating; the making of liquid manure from the weeds themselves as a preventative; also how to make and use seed ash and their homeopathic potencies.

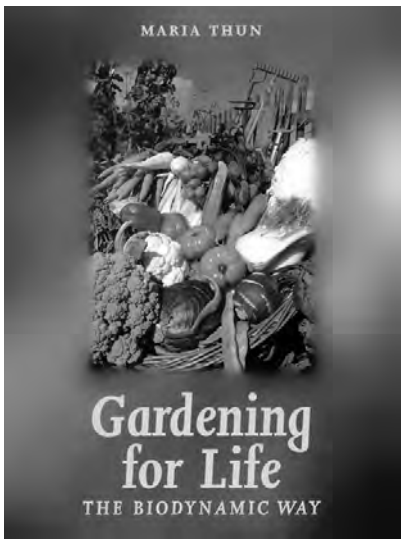
Fungal diseases and the forces which they favor are included for both fruits and plants. Given are instructions for what stage is best for gathering horsetail (*Equisetum arvense,* BD #508) to make the anti-fungal recipe in order to "to return fungi to their proper place".

Animal pests and their subsequent treatment are included in how to avoid problems with pests by making the plant as healthy as possible in order to ward them off, how the pest ashes are made, and when to spray them.

The planetary influences for sowing, cultivating and harvesting of the more popular root, leaf, flower, medicinal, and fruiting plants are given, as well as for fruit shrubs and fruit trees. For example, under the heading of Parsley: "Leaf days are best for sowing and cultivating parsley. However if you are going to use parsley in conserves, flower days should be chosen for harvesting and preserving."

Many times, occupations and time restraints make it difficult to garden at the specified times. However, through cultivating and spraying during the appropriate signs, amends can be made. In following the recommendations you are allowing the vegetables and fruits to grow to their fullest potential, and therefore are rewarded with the highest quality of enlivened food.

Words were not wasted in the writing of this book; it does not have that textbook 'pack everything there is to know about the subject' feel to it. You could sit and read it in a long afternoon, if you could resist stopping to take notes. It is in its own right a reference book, of the most pleasant variety, one that is actually enjoyable to read. The superb photographs or illustrations on almost every page are guaranteed to ward off winter doldrums as well as motivate us to follow her recommendations throughout the rest of the year.



No matter how much expertise you have, from novice to master gardener, this book has much to offer. There are some who might know it all, and in that case, this book is probably not for them. For those of us who still have a few things to learn, *Gardening for Life* offers up an inspirational guidebook.

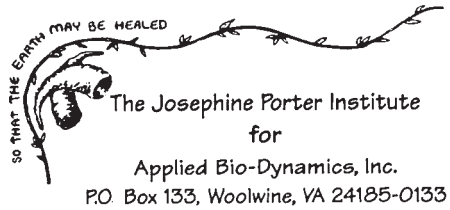
If all the high points of this book were stated here, you wouldn't need the book; for everything within its pages would be laid out before you. There is truly more information to review than can be done effectively without rewriting the book word for word.

We have been using JPI's preps, as well as our own horn manure and barrel compost, also known as 'cowpat preparation' on this farm for sixteen years and more recently utilizing the Pfeiffer Field Spray. It would have been a whole lot easier if we had had this book when we started out. Published by Hawthorn Press, Stroud, Gloucestershire, Great Britain. (Available from JPI for $26.00 plus $4.00 shipping and handling.)

Alice Petty is head gardener, Doris Petty is gardener and keeper of the fruits and herbs and Corry Watts is 'compost man' and farmer at Shepherd Hill Farm in Horse Branch, Kentucky.

"In a word, like sympathetic people in human society, who have a favourable influence by their mere presence and not by anything they say, so yarrow, in a district where it is plentiful, works beneficially by its mere presence."

Rudolf Steiner – *Agriculture* (Adams translation), p. 92



FIRST CLASS

Address Correction Requested