on holiday, or ask a friend to collect some for me. For grinding, I use an old hammer mill dedicated to oak bark.

Demeter

AP: What is your current role in Demeter?

UH: I am the administrator for Ontario and run everything under Demeter Canada. They receive the fees and pay for the inspectors. I send inspectors to the farms and they provide a report that I review with a few other experienced Demeter farmers and together we make our decision for certification based on the report. There are three provinces that are active with Demeter certification: Quebec, British Columbia and Ontario. Each one has its own administrator and Demeter Canada provides common standards for the trademark and certification. For the Demeter certification, you need to be fully organic certifiable with three years since the use of any conventional fertilizer or sprays. And, there needs to be at least two years of preparation use that includes two years of biodynamic compost and/or barrel compost, horn manure and horn silica on all the land.

AP: How many biodynamic farms are in Ontario now? UH: There are fifteen Demeter certified farms in Ontario and there are a few outside Ontario that I certify. I go wherever I am needed so I review two farms in Nova Scotia and one farm in Alberta right now and work with farmers in other provinces as needed. Three of the farms export

through Demeter and the rest sell in Canada and locally.

There is a large dairy farm, some grain farms. Most are smaller farms specializing in vegetables. There are several more farms working with biodynamics that are not certified and there are many organic farms in our area as well.

AP: What is the future for the Hack farm? Is the younger generation interested in farming?

UH: We will have to see. Between the two families, we have four boys and four girls. Most of them have some interest. We will have to see how it ends up. Two boys and one girl will be home this summer and the older children will all be away. The oldest boy who is almost twenty-five will be completing agricultural college this spring and he plans to work for two years on a conventional farm out west in Saskatchewan. At this age, they need other experiences.

AP: I remember reading that Steiner said biodynamics needed to be economically viable for it to be successful, that farmers needed to be able to make a profit. Your farm is a wonderful example of a resilient and profitable biodynamic farm organism. Thank you for sharing your many years of experience with us.

Demeter is the oldest worldwide certifying organization for sustainable agricultural practices. Since 1928, it has set the standard for biodynamic certification. For more information in the USA contact: www.demeterusa.org or for international www.demeter.net/what-isdemeter.

Response to "The Valerian Preparation (BD #507) Revisited"

Abigail Porter

In the Fall 2013 issue of *Applied Biodynamics* (No. 82), I raised the questions of both the translation of Rudolf Steiner's *Agriculture Course* on the subject and the appropriate timing for the application of the valerian preparation to the compost pile – questions which were previously raised by Joseph Stevens and Hugh Courtney in two articles in the Summer 2001 issue (No. 33). All three of these articles are available for you to read or download on the JPI website (www.jpibiodynamics.org).

I have since done a small informal survey and have found that people in various parts of the country are applying the valerian preparation at different times. Most people are sprinkling or spraying the diluted and stirred valerian over the outside of the pile at the same time the other preparations are inserted into the pile; some people are also pouring the valerian into a separate hole in the pile in addition to spraying it on the outside of the pile. Other people are waiting until the manure has been transformed by the preparations (a few weeks before using the compost) before they either spray

the valerian over the pile or pour it into a hole in the center of the pile. More recently, I came across yet another variation. Some people have been taught to put a little valerian in each hole with the other preparations in addition to spraying it over the outside of the pile.

Steiner gave indications on how the preparations were to be made and used and said that further experimentation and testing would be required. He recommended that we do our own investigation and research and not take his word or anyone else's as dogma. Much more research needs to be done with all the preparations and the valerian question is an easy place to start. Anyone making compost could do an informal trial by applying the valerian at the two different times and observing the results, both in the consistency and texture of the finished compost, and on the effect on plant growth and health in comparable test plots. If additional funding is available, conventional analysis, chromatography and sensitive crystallization pictures could be made of the

RESPONSE TO "THE VALERIAN PREPARATION (BD #507)"

composts, the soil in both plots a couple weeks after application of the compost, and the plants growing in the two plots to further verify differences and to determine if there is a preferred method of application. Good record keeping would be helpful including the date, crop and type of day (earth, water, air or fire) that seeds were planted. If any of you do any trials, please send your observations and findings to JPI so we can share them.

Since Malcolm Gardner worked on the 1993 Creeger and Gardner translation of the Agriculture Course, I asked him for his response to the questions raised regarding the translation and timing of the application of valerian. He has generously shared his thoughts below.

Malcolm Gardner's Comments on the Valerian Question

"When and how to apply the valerian preparation to a manure pile is a valid and important question. However, Steiner's use of the German words Dung and Dünger does not actually throw much light on this question. Dung is the same as our English word 'dung,' i.e., solid animal excrement (feces), while Dünger means fertilizer in general. The two German words are obviously closely related, which is not surprising since dung is traditionally used as fertilizer. In the Agriculture Course, Steiner is fairly loose with his use of these two words and their variants as well as with the word Mist (which has almost the same meaning as Dung but often refer to both solid and liquid excrement).

"When describing the valerian preparation in Lecture Five, Steiner first says to add it "bevor man den so zubereiteten Dünger verwendet" (before one uses the treated fertilizer), and then immediately goes on to say that it should be added in a very fine manner to the dung ("dem Dung"). In this case, therefore, it is particularly clear that he is using Dünger and Dung interchangeably and is not trying to make any distinction between dung as unfinished manure, and fertilizer as finished manure. (For this reason, it is no sin to translate both German terms here with the single English word 'manure,' which is more common than 'dung' and which can also mean 'fertilizer.')

"Conversely, when Steiner describes the other compost or manure preparations, he is equally loose with his terms. He says to add the yarrow to a Misthaufen (manure pile), the chamomile and nettle to the *Dünger* (fertilizer), the oak bark to the Düngemassen (fertilizer masses) and the dandelion to the **Dung** (dung). Incidentally, when Steiner does explicitly refer to unfinished (fresh) manure, as he does in connection with tomatoes in Lecture Eight, he uses the term wilder **Dünger** (literally: wild *fertilizer*). (For those who want to study this further, the German text of the Agriculture Course can be found online at http://bdn-steiner.ru/cat/ga/327.pdf.)

"As regards the original question, however, I think it is

significant in itself that valerian is not mentioned until the very end of Lecture Five and that it is also not mentioned on page 30 of Steiner's handwritten notes where the other five manure preparations are listed (valerian is then listed briefly on page 33). Furthermore, while the first five manure preparations are solids that have undergone a period of burial and have a connection to potassium and/or calcium, the valerian preparation is a liquid that does not need any burial time and is connected with phosphorus ("it helps the manure relate in the right way to the substance we call phosphorus"). Lastly, while the solid preparations are meant to work on the manure pile from within (see Steiner's sketch in the Second Discussion), Steiner indicates that the liquid valerian preparation should be applied in a "very fine manner," i.e., sprayed on the outside of the pile (presumably in order to mediate forces coming from the periphery).

These considerations suggest that the valerian's role with respect to the manure may be quite different from that of the other five preparations, and that unlike the solid preparations, which Steiner says can stay mixed with the manure for any length of time (Second Discussion, 15th answer), it may indeed be best to spray the valerian on the manure not long before the manure is spread on the soil, especially if a crop is planted soon thereafter. Phosphorus is a carrier of energy and is most needed by plants when they are growing most actively. Seeds usually have relatively large amounts of stored phosphorus (e.g., as phytates), which at germination is then released by enzymes (phytases). After germination, however, plants depend on external sources of phosphorus, i.e., from soils and fertilizers. Valerian's role may well be to facilitate the release of phosphorus from these latter sources. If so, then it would make a lot of sense to wait to spray the valerian and spread the manure until just before the phosphorus and the energy were actually needed and not risk having them dissipate prematurely. One does not strike a match until just before one needs a fire! (Perhaps not coincidentally, phosphorus is an essential ingredient in every match.) In any case, some comparative trials would be very welcome here."

Please Note Our New Contact Information

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