ERRATUM A Biodynamic manual, second edition.

We deplore the English translation for its overall inaccuracy. The entire text has been over-simplified. Much of the French text has been poorly translated and often the meaning has been completely lost. Please find attached remarks or corrections of major errors in translation.

The word "ferments" everywhere in the book should be replaced with "macerations". The word "green cover crops" should be replaced everywhere in the book with "green manure".

Page 22 (line 5) - Replace « autumn horn manure » with : « cow pat pit /barrel compost »

Page 44 (lines 8 - 10) – Replace « In some ways, this preparation is an application of light that helps improve vitality during the vegetative (growth) stage but can also lead to excessive leaf growth» with : « In some ways, this preparation is a « spray of light » that can both increase vitality during the vegetative stage, or reduce vigour, according to the circumstances. »

Page 48 (line 6) - Replace « For legumes and grain, ... » with : « <u>In market gardens and on</u> cereal crops, ... »

Page 50 (line 6) - Replace « lack of woody growth » with : « lack of wood maturation »

Page 54 (line 3) – Replace « flowering legumes » with : « vegetable plants during flowering, »

Page 77 Replace « compost preparations » with « <u>barrel compost</u> » This error occurs 3 times on this page.

The title should read : « <u>Barrel Compost and Starters</u> » Line 1 should read : « <u>There are many variants of barrel compost.</u> » Line 10 should read : « <u>These barrel preparations</u> ... »

Page 78 (line 20) – Replace « ... good compost ... » with : « <u>the impulses of the six compost</u> preparations (their action on organic matter ... »

Page 88 (line 7&8) – Replace « composted manure » and « compost preparation » with : « <u>barrel compost</u> »

Page 92 (line 7) - Replace « birth pit preparation » with « stirred barrel compost »

Page 100 (line 5) – Replace « Make a horsetail decoction two weeks before use » with : « Make two weeks' worth of horsetail decoction ahead of time, »

Page 100 (line 7) – Replace « Make the clay mixture a week before » with : « <u>Make a week's</u> worth of clay mixture in advance, »

Page 104 (line 24) – Replace « especially because rhythms repeat over several years. » with : « especially if rhythms repeat over several years. »

Page 112 (line 19) – Replace « for other biodynamic treatments » with : « for treatments allowed by the biodynamic standards, »

Page 126 (line 6) – Replace « use as a powder added to clay. » with : « add it to a powder application of clay. »

Page 126 (lines 22 - 25) – Replace « The growth of young plants can sometimes be slowed down by the first spraying of horn silica (501) at the 5-leaf stage, especially if they're just budding. » with :

« The first application of 501 in spring on vines at the 5-leaf stage can slow growth of young vine plants (newly-planted vines) that may only be at bud-burst. To prevent blockages of this kind, use valerian in conjunction with horn silica (501). Add valerian (5 g/ha (1/2 fl oz/10 acres) to the 501 before stirring. »

Page 127 (lines 3 - 6) - replace « poor leaf and branch growth and increased susceptibility to rot » with :

«<u>It's worth noting that, contrary to common practice, adding valerian to the preparations 20</u> minutes before the end of stirring produces negative results (disturbances in leaf and vine behaviour, partially-developed maturation, and increased susceptibility to rotting.) »

Page 127 (line 8) – Replace « or at the very end » with : <u>"at the very end of stirring, but</u> should **never be added during the stirring process**."

Page 127 (lines 18 -21) – Replace « with the wine less susceptible to oxidisation. The winemaker is therefore able to use less sulphur at other stages » with : « Yarrow tea used on vines during the growing season confers a « sulfur signature » to the sensitive crystallization pattern in finished wine. Their resistance to oxydation is enhanced, which suggests that use of sulfites to protect wine from oxydation can be reduced. »

Page 149 (line 21) – Replace « ... cow manure ; avoid compost made exclusively from green kitchen and garden waste» with « ...cow manure. It is not advisable to use green waste compost for compost teas...»

Page 161 (line 28) - Replace « osier, » with <u>« willow, »</u>

Page 183 (line 10) – Replace « each person must find their own rhythm and shaking pattern » with : « <u>D1 is obtained after rhythmic shaking in a clean bottle (or 100 « succussions ») for 3</u> minutes. »

Page 184 (line 5) – Replace « it is unnecessary to refer to the planting calendar for burning weeds. » with : « it is unnecessary to refer to the zodiac constellations for burning weeds. »

Page 190 (line 7) – Replace « You can also spray a compost preparation (barrel or birch pit préparation). » with : « <u>You can also spray barrel compost.</u> »

Page 191 (lines 5-8) Replace « It has been observed that valerian sprayed after the veraison stage improves the development of the grapes, reducing dryness in the finished wine. The wood also seems firmer at pruning time. » with :

<u>« If hail occurs after the veraison stage, observation shows that spraying vines with valerian</u> regulates grape maturation and reduces dryness and harshness in the finished wine. Firmer wood at pruning time the following year has also been noted. »

Page 197 (line 5)

Replace « Treatments are done the day before sowing. » with : « <u>Treatments should be carried</u> out the day before sowing. Use two to three litres of liquid per 100 kg of seeds. The proportion of preparation used should be 1% for barrel composts and « horn manure » and 1/1000 if using compost preparations. »

Page 199 (lines 4 - 6) Replace « Horn manure (500), camomille (503) and oak bark (505) generally reinforce the calciferous process, resulting in larger produce. » with : « Horn manure (500), camomile (503) and oak bark (505) generally reinforce the lime process and the relationship with the earth element and have a tendancy to produce larger vegetables. »

Page 204 (line 29) – Replace « before lightly tilling with a tine harrow. » with : « before superficially incorporating the green manure with a tillage implement.»

Chapter 15 : Large scale farming.

The translation of this whole chapter has been over-simplified. Title headings have been changed, rendering the text inaccurate. The concept of the individualised farm organism has been omitted. Below some examples of errors in translation :

Page 212 (lines 3 and 4) « It is intended as a supplement to the general advice elsewhere in this book, not a replacement. » should read : « <u>The information provided in this chapter is</u> intended to supplement sound, general agronomic knowledge and practice. »

Page 213 (line 7) « In fact all living aspects of a farm ... » should read : « <u>In the farm</u> organism, where livestock often play a central role, any input brought in from outside sources (manure, forage, seeds, etc.) should be considered as a means of re-establishing the health of a farm organism that is out of balance. »

Page 213 (line 19) – Replace « Aren't animals just, as Backevell described, » with : « <u>Are</u> animals just, as Backevell described, »

Page 214 (line 16) Replace « Flightless poultry are natural consumers of grass and insects, along with fly or mosquito eggs and larvae ...» « <u>Providing poultry with sufficient outdoor</u> space is essential. By consuming grass and insects, as well as fly and mosquito eggs and larvae, the need to bring in grain and protein from outside sources is reduced. »

Page 216 (line 15) - Replace : « It's a good idea to permanently ... » with : « <u>It is necessary</u> to keep some part of the farm as permanent pasture. This helps to establish a natural balance between soil, climate, and livestock management and diversity.»

P 225 (line 18) - Replace "Long and well-planned rotations are the best way of managing soil fertility, salt levels and pests" with "Long and well-planned rotations are the best way of managing soil fertility, weed development and pests."

P 226 (line 2) - With regard to the sentence : "Sattler and Wistinghausen, in their book *Growing Biodynamic Crops*, offer examples of 5-year crop rotations." This reference does not appear in the French text which talks about <u>crop rotation over a 6 to 13 year period</u> (Koepf, Schauman, Haccius. « Agriculture biodynamique. Introduction aux acquis scientifiques de sa méthode » ed. EAR 2001).

P 227 (line 13) - The sentence : "As we have seen elsewhere in this book, well-spread manure, along with rich compost, are fundamental to healthy soil, and healthy soil allows plants to draw the nutrition they need." is not a translation of the French text.

P 227 (line 19) - Replace "Compost is ideally applied to cover crops at the end of the summer, about 15 tonnes/hectare" with "<u>Compost is ideally applied to catch crops at the end of the summer, about 15 tonnes/hectare ...</u>"

P 228 (line 4) - Replace "On large farms ... " with <u>"On field crops there is considerable cost</u> involved with green manures and they require rigour, ... "

P 228 (line 8) – Replace "Don't sow species which can grow rampant ..." with : <u>« Certain plants in the green manure blend, such as buckwheat and vetch, can become</u> troublesome. Care should be taken not to let them go to seed. »

P 229 (line 10) - Replace " ... horn manure can be used to refresh plants suffering from drought (spray onto leaves), ..." with : "... horn manure can be used (as a spray on leaves) to restore plants suffering from drought or lacking vigor. »

P 230 (line 4) - Replace " ... and have enough spray ready for the surface area." with : "... and ensure that you have the right equipment for the surface area to be sprayed."

Pages 229 (line 26) and 230 (line 22) - Incorrect translation. The word "tillage" is used instead of the word <u>"tillering".</u>

Page 232 (summary) - The reference to the Ecodyn-Wenz system is omitted : www.ecodyn.fr

Chapter 16. Vegetable Farming

Page 234 (line 11) - Replace : « It's possible to start a local agricultural business with a small area of land and little capital investment, assuming suitable soil can be found – that is, deep and fertile enough and not requiring too much watering » with :

« <u>It is possible to start up a local agricultural business with a minimum of land and capital,</u> <u>assuming suitable soil can be found</u>. Soil should be sufficiently deep and fertile and a <u>minimum of irrigation should be possible</u>. »

Page 235 (title) - Replace the title heading "Planning and preparation of the soil" with : "Basic Planning and crop rotation".

Page 235 (line 16) - Replace "fine and rough compost" with "mature compost"

Page 237 (line 9) - Replace "It is essential that well-composted manure is used, with no remaining trace of its original material." with : "It is essential that well-composted manure is used, with no remaining trace of straw."

Page 238 (line 16) - Incomplete translation. "In intensive vegetable farming with three or four crops per year, the preparations must be applied more frequently: as many as four or five sprayings of horn manure (500 or 500P), and two (spring and autumn) at the very least." *The following text is left out of the English translation* <u>« Regular applications of biodynamic preparations, as well as frequent use of green manure reduces the need for fertilisers. »</u>

Page 239 Title heading should read "Green manure" and not Green cover crops.

Page 239 - Replace "green cover crops" everywhere with <u>"green manure"</u>

Page 239 (line 19) - Replace : "Winter cereal crops work well but legumes (clover, vetch, winter field beans) are best." with : "<u>Winter cereal crops work well, but combining them with</u> leguminous plants (clover, vetch, winter field beans) is even better."

Page 241 (line 4) - Replace "a fine layer of silicon sand" with "a fine layer of silica sand"

Page 242 (line 17) - Incorrect translation : "... especially if they clash with a particular agricultural activity". Replace with : <u>« ... especially when one is just starting up vegetable production</u>. »

Page 243 (line 20) - Replace "Soil is best worked late in the season, before winter, for spring planting." with <u>: « Ploughing should be done late in the season, before winter, for plots to be used in early spring. »</u>

Page 244 (line 1) - Replace "Avoid rotavators or disc harrows" with "<u>Avoid working the soil</u> with powered tools"

Page 244 (line 6) - Replace : "Avoid very fine surface soil; don't churn it up" with : <u>« Care should be taken to work the soil slowly</u>. Working too fast can brutalize the soil and generates <u>fine particles</u>. »

Page 244 (line 7) - Replace "loose soil structure" with "crumbly soil structure"

Page 245 – Insert the following "For more information and photo gallery about Stephan Funke : <u>http://vernoux.org/ecodyn/?page_id=318</u> or <u>www.ecodyn.fr</u>" after the sentence "water usage are also improved."

Chapter 17. Care of Fruit Trees

Page 248 (line 1) - Replace : "This chapter is primarily for those managing fruit trees as part of a larger farm, rather than professional or amateur orchard specialists." With : <u>« Orchards are an important part of the biodynamic farm organism.</u> This chapter provides information that may be useful to farmers with orchards and home gardeners. »

Page 252 (line 3) - Replace "Thorough preparation of the soil at the point of transplanting" with : "<u>Thorough preparation of the soil and the care and attention taken when transplanting are the keys...</u>

Page 266 (line 13) - Replace "Vegetable composts are useful for orchards and vineyards, but it helps to add a bit of composted animal manure (horn manure or powder)." with : "... <u>but it helps to add a bit of animal manure (manure or horn meal)</u>."

Page 266 (line 20) - Replace " ... incorporating a third to a half animal compost." with : ".... by incorporating one third to one half bovine or horse manure."

Chapter 18: Viticulture

Page 273 (line 4) - Replace "Finally, to finish the cycle and start the next season, apply horn manure preparation (500 or 500P) as soon as possible after the grape harvest." with : "To finish the cycle and prepare for the next season, apply 500P as soon as possible after the grape harvest."

Page 273 (line 11) - Replace "or if there is not enough mature wood" with : "<u>if wood</u> maturation is insufficient"

Page 275 (line 13) - Replace "...minimising copper doses requires spraying horsetail decoction in the spring, as well as adding horsetail to all plant health treatments, whether teas or blends, mixed with copper and sulphur". with : « ...<u>minimising copper doses requires</u> spraying horsetail decoction in the spring, and the addition of herbal teas or blends to all copper and sulfur plant treatments. »

Page 275 (line 17) - Replace "Horsetail decoction applied at moon's perigee, especially around full moon, helps to strengthen the resistance of vines." with : « <u>Care should be taken to improve resistance to disease at the moon's perigee, especially if this is close to the full moon.</u> »

Page 275 (line 21) - Replace "but don't spray during flowering period (spray either before or after) with : "(spray before **and** after)"

Page 275 (line 31) - Replace "In almost all cases, if there is reasonably good health and low pressure from mildew " with : "In almost all cases, if there is no excessive vigour and low pressure from mildew"

Page 278 (line 19) - Replace "you must protect the flower by only spraying immediately before or after flowering" with :"you must protect the flower by spraying immediately before and after flowering."

Page 280 (line 23) - Replace "bats can be encouraged by introducing bird nesting boxes for use as temporary lodges" with : "the presence of bats can be encouraged by introducing suitable nesting boxes for them to use as temporary lodges."

Page 284 (line 18) - Replace "Valerian is valuable in this situation for both the grape and the vineyard" with: "<u>Valerian is valuable in this situation for both the vineyard and the winegrower.</u>"

Page 285 (line 10) - Replace "Aim to leave some grassy ground cover between the vines through the summer ..." with : "<u>Aim to leave some grassy ground cover between the vines throughout the summer ...</u>"

Page 286 (line 10) - Replace "Do not start any work on the soil until it is either dry enough or you are sure of at least a few sunny days ..." with : "Do not start any work on the soil until it is dry enough **and** you are sure of at least a few sunny days ..."

Page 289 (line 22) - *Please note that the following* : "At this time sow a green cover crop, like phacelia that will easily be taken by winterkill and leave a good structure of soil depth. The preparation of the soil before replanting is then limited to a pass with the cultivator without disturbing the deeper soil." *should not be in the paragraph under the title heading* "Other mixes" *and is therefore incorrect. This text should be found in the section* "Transplanting".

Page 290 (line 11) - The sentence "Transplanting should immediately be followed by spraying 500P and painting the plants with a mix of manure, clay, basalt and 500P." *has been added by the translator, and is incorrect.*

Page 291 (line 1) - Replace "Winemaking must respect the biodynamic vinification standards" with : "Winemaking must respect the product and the biodynamic vinification standards."

Page 291 (line 11) Replace "If grape growing and vinification respect the fruit ..." with <u>"If vinification and ageing of wine are carried out in the same spirit as the growing of the grapes, these qualities will be reflected in the finished wine."</u>

Page 291 (line 25) Replace "... (for example, staying fresh and tender during dry years ..." with : "... (for example, staying fresh and "taut" during hot, sunny years ..."

Page 292 (line 7) - Replace "Some winemakers have had good results adding one drop of valerian per bottle." with : "Some winemakers have had good results adding one drop of valerian per **barrel** (228 litres)."

Page 294 (line 11) - "Hormones cannot be used in grafting, rooting and pruning." The word "pruning" has been added incorrectly, and has no meaning whatsoever.

Page 298 (line 18) - Replace "In developing countries, the diversity and autonomy of most farms often increases soil fertility and can help create a harmonious landscape which can also nourish thousands." with : "<u>In developed countries, farm diversity and autonomy should increase soil fertility and contribute to creating more harmonious landscapes which are also food for the soul.</u>"

Page 299 (line 3) Replace "This is a positive contribution to reducing carbon dioxide, necessary to combat global warming." with <u>« This is a positive contribution towards the long-term storage in the soil of CO2, necessary to counteract global warming. »</u>
