THE HERBAL EYE

THE HERBAL ALLIANCE JOURNAL

Spring Equinox 2023

RAISING OUR SUSTAINABILITY AWARENESS FOR COLLECTIVE ACTION

IN THIS ISSUE:

- EXTINCTION THREATS AND CITES PROTECTION ARTICLE

- EXCLUSIVE MONOGRAPH ON PRIMROSE

- STEPS TOWARDS A SUSTAINABLE DISPENSARY



THE HERBAL EYE

THE HERBAL ALLIANCE'S QUARTERLY JOURNAL

EDITORIAL TEAM

Editor-in-Chief & Designer: Luke Heron Editor: Karolina Raczynska

Contributing writers in order: Sonia Dhanda, Vicky Murray, Atsuko Mason, Josef A. Brinckmann, Marina Kesso, Sarah Hawkins, Ann Armbrecht, Kaye Angus, Kathleen Jones

HERBAL ALLIANCE BOARD OF DIRECTORS

Conny Cooper, James Wiltshire, Lloyd Gee, Marion Mackonochie, Rumana Zahn, Sebastian Pole, Simon Mills and Vilma Matuleviciute.

Featured cover photograph: Early Spring Golden Root *(Rhodiola rosea)* growing on an organic Farm in County Down - Northern Ireland

Herbal Alliance affiliated Professional Associations:

Association of Chinese Herbalists in Ireland Association of Master Herbalists (AMH) Association of Traditional Chinese Medicine (ATCM) Ayurvedic Professionals Association (APA) British Association of Accredited Ayurvedic Practitioners (BAAAP) British Association of Traditional Tibetan Medicine College of Practitioners of Phytotherapy Foundation for Insight Herbalism International Register of Consultant Herbalists Irish Institute of Medical Herbalists Irish Register of Chinese Medical Herbalism (IRCMH) Irish Register of Herbalists National Institute of Medical Herbalists Professional Register of Traditional Chinese Medicine Register of Chinese Herbal Medicine Unified Register of Herbal Practitioners

DISCLAIMER: All information included within this publication is provided for educational purposes only and is intended for professionally trained & insurred practitioners of Herbal Medicine. It is not intended for self-diagnosis, self-treatment of any ailment or disease. Nothing stated herein should be considered medical advice of any kind. Information herein does not replace proper medical care. Please address your health and well-being with your own trained practitioner. Your health is your own personal responsibility. You are completely responsible for your own actions and for knowing how to use herbs and their various forms and byproducts safely and by reading this publication, you are agreeing that the Herbal Alliance, the authors presented herein, and all associates and affiliates shall not be held liable for any kind of harm or discomfort that you may experience. Affiliate links may be used on occasion, but only for products or services we actually use and approve of ourselves. We are highly selective when choosing companies, brands, authors, etc. to work with and feature in the magazine, choosing to feature only products that meet our very high standards. Opinions of the individual authors are exactly that and do not necessarily represent the opinions or viewpoints held by the Herbal Alliance, the Professional Associations or any of its members or affiliates. For personal, non-commercial use only.

WWW.HERBALALLIANCE.UK



CONTENTS

- 4 EDITOR'S NOTE / SHAPING THE FUTURE DIRECTORS
- 6 SHAPING THE FUTURE LETTER TO THE COMMUNITY
- 9 JOIN THE FIND A HERBALIST FEATURE
- **10 UPCOMING EVENTS**
- 16 COMMUNITY ACTION TEAM UPDATES
- 18 INTRODUCTION & UPDATES FROM PROFESSIONAL ASSOCIATIONS
- 22 EXTINCTION THREATS AND CITES PROTECTION: RHODIOLA AS A CASE STUDY BY SONIA DHANDA
- 26 HERBALISTS AND SUSTAINABILITY: LET'S WORK TOGETHER BY VICKY MURRAY
- 32 HU-SUI CORIANDER MONOGRAPH BY ATSUKO MASON
- 34 FIRST DO NO HARM: A CALL FOR SUSTAINABLE HERBALISM IN CLINICAL PRACTICE CELTIC HERBAL MEDICINE BY JOSEF A. BRINCKMANN
- 40 THE STEPS TOWARDS A SUSTAINABLE DISPENSARY: GROWING MEDICINAL PLANTS FOR YOUR PRACTICE BY MARINA KESSO
- 46 EXLUSIVE MONOGRAPH: PRIMROSE PRIMULA VULGARIS L. BY SARAH HAWKINS
- 60 PARSNIP SUPERMOON FORAGING BY KAYE ANGUS
- 64 HAWTHORN, CRATAEGUS SPP. BY KATHLEEN JONES

YOU CAN CLICK ON THE TABLE OF CONTENT TO SKIP TO THE ARTICLES



EDITOR'S NOTE

The Spring Equinox marks the balance between Light & Dark. These crucial states are indispensable for the nurture of plants and fungi. The importance of balance between dualities has been observed and philosophised throughout history by the many civilisations that walked this beautiful Earth. Be it Day & Night, Yin & Yang, Hot & Cold, Dry & Wet, Asha & Druj, Male & Female, the list is exhaustive - but

in essence, one could not exist as it is without the other.

While such aforementioned dualities are much easier to define, more complex systems of balance exist within the world. Many of which have massive impacts on us as individuals as much as a collective. Even the ancient Greeks philosophised about the "Golden Mean" being the desirable space one should achieve between two extremes.

Whether we look at the idea of "balance" within the micro- or macrocosms, as holistic practitioners, we understand that the complexity of our bodies requires careful assessment of all aspects of health. From the nutrients we ingest to all our cells and microorganisms, organs, energetics, the mind, body & soul. If something becomes imbalanced in the body, something else might take the hit and this is observed as deficiency or excess.

It was during the Scientific Revolution that the Western world devolved its view of the earth as being nothing but a machine. This changes from the age-old perception of the Earth, or the land we live on, as being alive or even characterised. Here in Ireland, our ancestors experienced the Island as *Ériu, Gaïa* symbolised the world to the Greeks, *Hòutu* "Queen of the Earth" to the Chinese, *Bhuma Devi* in India, *Pachamama* to the Incas to name but a few. *Earth*, the mother of all things alive, the womb of all life. It is only in the relatively recent centuries that the scientific consensus was made that Earth may be viewed as a dead rock floating in space on which we happen to live, though some scientists are presently questioning this.

And perhaps this is part of the problem. It is clear that the earth and our ecosystem are in a state of imbalance, and if we were to inspect her as we would a patient, we would soon realise that her current 'energetics' will not sustain her 'health'.

Despite the mountain of evidence that exists in support of Plant intelligence, we have been hell-bent on seeing them as having a lower state of existence. Even Darwin himself, primarily a botanist, acknowledged their intelligence and sentience. This has been well-explained in one of my favourite books, *Brilliant Green*, by Stefano Mancuso and Alessandra Viola.

Perhaps it is time to question ourselves about our view, our relationship with the Earth & its ecosystem and to remember that, while we know a lot, we actually know very little. Species are going extinct, climates are shifting and humanity is playing a major role in the health of the planet.

I am not worried about the Earth in the long term, it has gone through so many cycles of extinction and climatic changes, yet life on it has always survived in some shape or form. However, I am concerned that as humans, we are directing ourselves and all life in this age towards hardship and dis-ease with the current state of our self-centred relationship with the planet.

If we can shift our perception of Earth as a complex organism that needs our care - if we can strive to collaborate towards more sustainable practices - to bring balance in how we operate as clinicians and to share this perspective with all who will listen - then perhaps we will help shape a better future, health and harmony for the children that will walk after us.

"Declare the past, diagnose the present, foretell the future." - Hippocrates

We hope you enjoy this issue that focusses on how we can collaborate, as a community of Herbalists, to champion Nature, its many gifts and the beautiful intelligence that we are all a part of.

Luke Heron Dip. HerbMed mIRH, Editor of The Herbal Eye.

REWATCH ENGAGING WITH THE WORLD ON THE MEMBER PORTAL

AS A HERBALIST PRACTITIONER MEMBER OF OUR FREE PORTAL, YOU WILL HAVE ACCESS TO REWATCH ALL OUR CONFERENCES AND CATCH UP ON THE ONES YOU HAVE MISSED.

If you haven't already signed up to the Herbal Alliance Member's portal yet and you are a Practicing Herbalist, please feel free to join **for free** by following the link below. Once your account is approved, you will have access to our all our features such as our Network of Herbalists, Find a Herbalist listings, all our previous conferences and much more!

THE DIRECTORS OF THE HERBAL ALLIANCE









SHAPING THE FUTURE

A letter from the Directors

As Spring awakens nature into a period of rapid growth – and producing the medicines that we use – it is good time to look at how we can grow as herbalists both individually and collectively.

Safety, Efficacy & Sustainability are the current key themes for Herbal Alliance. There is currently a Sustainability project with a review event for any members to attend on 24th March. Though sustainability is seen here in its environmental and supply context, we also look at exploring the wider context of our role as herbalists in sustainable models of health care.

We have had growing interest in Herbal Alliance activities from herbalists from other countries as well as from people who are not herbalists but support our practice like researchers and other CAM practitioners. Though Herbal Alliance is primarily for facilitating collaboration between herbalists based in UK and Ireland, some involvement from the international community and allied professions may be beneficial so we are looking into associate and friends membership.

A recurring issue within the herbalist profession is insurance cover for herbal medicine. At the moment some insurers and health savings plans cover other CAM modalities like homeopathy and reflexology, but not herbal medicine. The replies from these companies previously have been mainly that there is not enough demand. We need volunteers to help out in making another attempt to get our practice recognised in these policies.

The last Herbal Alliance online practitioner event was Engaging with the World - Bringing Herbalism to the Community. This was a most inspiring event where we heard from speakers who were reaching out and bringing herbal medicine to people who might not otherwise not connect with herbalists. If you did not attend, viewing the recording on the professional portal is highly recommended. Future events are being planned mainly around the priorities identified by the Herbal Alliance membership. Ideas for themes or content are always welcome, as are volunteers to help run them.

Herbal Alliance was set up to facilitate discussion, collaboration and action. For legal reasons it needed a group of directors, but our role is facilitation and coordination; not direction. There is much to do to maintain and expand the role of herbalists in the health of our nations so please find ways to engage with this process. If you think there are better ways of doing this, please share this with us either by email to info@herbalalliance.uk or better still, through discussion groups in the portal under the Herbal Alliance Feedback Group.

Best wishes The Herbal Alliance Directors



6

AN OPPORTUNITY TO SHARE WHAT YOU DO

Share, Create & Engage!

We are looking for Herbalist Authors to help us with adding content to the Herbal Alliance Journal.

Can you help?

Content can range from articles on Herbal Medicine, Science, Recipes, Formulae, Reviews, Poetry and so on. This is an opportunity for you to share content **you have already written or exclusive material** with Professional Associations and their members as well as other Herbalists. Also, to have a small paragraph about yourself, what you do and your website / social media channel(s). Interested?

Upon submission, our editorial team will choose what pieces will feature in the next issue. We will prioritise articles and submissions that are closely themed to the Season of the issue in question. Our next journal is due for the **Summer Solstice** and thus the theme will be centred around this, so get your thinking hats on !

Submit your content to journal@herbalalliance.uk



Prunus sp. - Plum tree blooming in early Spring, County Louth, Ireland.





WE WOULD LOVE YOUR FEEDBACK! WE REALLY DO.

We spend a lot of time compiling and writing up this journal and we would love to know ways we can improve it. If you can spare 5 minutes, please complete the survey below:

HTTPS://FORMS.GLE/YNARCVE121C9EAYK7

GET IN TOUCH if you wish to submit any content: journal@herbalalliance.uk

ARE YOU BASED IN THE UK OR IRELAND AND HAVE YOU NOT SIGNED UP FOR YOUR HERBAL ALLIANCE ACCOUNT YET?

SIGN UP USING THE BELOW LINK:

WWW.HERBALALLIANCE.UK/JOIN-AS-A-MEMBER/

FIND A HERBALIST

JOIN OUR FIND A HERBALIST FEATURE

Let's make our LISTINGS feature representative of our greater herbal community. By adding your clinic listing you will have an extra place to advertise your business while contributing to a better public image for Professional Herbalists throughout Ireland & the UK.

HOW TO ADD YOUR LISTING IN 3 SIMPLE STEPS

- 1. LOG IN to your existing account on the Herbal Alliance Member's Portal.
- 2. CLICK on ADD MY CLINIC LISTING on the side panel (or Mobile Menu). It is best to use a desktop computer rather than a mobile device to enter your details.
- **3. SUBMIT** your form. As your listing will be reviewed by one of our team, it will take up to 14 days before it appears on the map.

So what are you waiting for? It's a FREE way of listing your practice!

<u>Please Note:</u> You do not need to pinpoint your exact location if you do not wish to. You can add your nearest town as your location on the map.

Full details & instructions for posting your listing are found on the "add your listing" page.

WHAT IF I DON'T HAVE AN ACCOUNT WITH THE HERBAL ALLIANCE?

If you haven't already signed up to the Herbal Alliance Member's portal yet and you are a Practicing Herbalist, please feel free to join **for free** by following the link below. Once your account is approved, you will be able to add your listing too!

NOTE: While Practitioner students may apply, they may not submit on FIND A HERBALISTS.

FIND A HERBALIST





PROPERVUD CLINE AND CUID

Herbal Alliance Assembly ~ Sustainability Project Review Calling all Herbalists to join in this important discussion.



Friday, 24th March 2023 9.30 am - 12.30 pm (GMT) Online via Zoom

FREE REGISTRATION https://herbalallianceassembly.eventbrite.com

JOIN THE HERBAL ALLIANCE ASSEMBLY FRIDAY 24TH MARCH

You are all invited to come and hear the insights revealed from the Sustainability Review. Following a series of interviews, clinic visits and a survey, the Supply & Sustainability CAT have developed valuable outcomes for us all to engage in. Focusing on sustainable supply, ethical trade, impact on quality, packaging, climate and education, we have some positive ideas to help us all be better informed and in a position to take more positive collective action.

Includes a talk from Christina Archer, feedback from Sustainability Expert Vicky Murray, group discussion and updates from the Research and Education teams by Sebastian Pole, Marion Mackonochie and Andrew Flower.

PRACTITIONER EVENT

LOCATION Online

DATE & TIME March 24, 2023 9:30 AM - 12:30PM (GMT



EVENTS

Feel free to share these events with your clients and your friends who might be interested !

PUBLIC EVENT

BALANCING WOMEN'S HEALTH & LIFE TRANSITIONS WITH AYURVEDA HERBAL ALLIANCE WEBINAR

with Karolina Raczynska Ayurvedic Medicine Practitioner Open to all members of the Public Tuesday, 25th April 2023 6.30 pm - 7.30 pm (BST)



Sustainable Herbs Program American Botanical Council



Why Prescribing Sustainable Herbs Matters A Conference for Clinical Practitioners Thursday, April 27, 2023 US: 10 am-2 pm (EDT) ~ UK: 3 pm-7 pm (BST) Online via Zoom



EVENTS

TELL ME A STORY: HOW NARRATIVES & SYMBOLISM HELP US MAKE SENSE OF HEALTH IN A HERBAL CONSULTATION

HERBAL ALLIANCE PRACTITONER EVENT



Q: 1 2.

E

Tuesday, 4th May 2023 2.00 pm - 4.00 pm (BST) Online via Zoom

wanzig Kunden

stehn und liegen

PUBLIC EVENT

PRACTITIONER EVENT

WHY GUT WELLNESS MATTERS & HOW TO IMPROVE DIGESTIVE DISORDERS



by CELINE KONWINSKI, LLOYD GEE & VASANTI LIMBANI OPEN TO ALL MEMBERS OF THE PUBLIC

> TUESDAY, 23rd May 2023 7.00 PM - 8.00 PM (BST)





EVENTS

PUBLIC EVENT

THE ART OF CLEANSING & FASTING TO SUPPORT HEALTH WITH AYURVEDA



MARCH 2023

JOANNA WEBBER & KATE SIRAJ AYURVEDIC MEDICINE PRACTITIONERS CO-FOUNDERS OF THE AYURVEDA ACADEMY OPEN TO ALL MEMBERS OF THE PUBLIC

> TUESDAY, 13TH JUNE 2023 6.30 PM - 7.30 PM (BST)

Sustainability & Regenerative Practices **TOOLKIT** VERSION 2.0

> Sustainable Herbs Program AMERICAN BOTANICAL COUNCIL



INTEGRATIVE & PERSONALISED MEDICINE CONGRESS 23

The largest conference and exhibition designed for medical & healthcare professionals focusing on patient-centred, whole-person care in the UK. Highly acclaimed healthcare professionals will present the latest evidencebased research and case studies during three cutting-edge conferences (Whole-person Health, Integrative Mental Health, Food on Prescription), taking place alongside an international exhibition and programme of CPD approved workshops.

Members of the Herbal Alliance can register for the conference at the discounted members rate using the promotional code: HERBA-20

Conference passes start from £140 per day (exhibition and workshop only passes from just £25). To register visit: https://www.ipmcongress.com/register



29 June -1 July QEII Centre London UK

The future of medicine Promoting whole-person, patient centred health > ipmcongress.com





Entry to exhibition and workshops from £25 Conference prices start from £140 Organised by: **progressive** \bigcirc communications





We are delighted to announce the 11th annual HerbFeast 2023 in Ireland!

ETBECSE

IRELAND

The Community of Irish Herbalists

This is a celebration of the Herbal Medicine tradition, herbalists, and, of course, herbs. Our annual event is open for professional herbalists and students of all traditions, and will take place on the 19th-21st of May, 2023 (www.herbfeast.ie).

As always, the days will be packed with talks on herbal medicine and clinical practice, workshops, discussions and herb walks. We are thrilled to have some renowned speakers, including Henrietta Kress, Danny O'Rawe, Bevin Clare, Courtney Tyler, Marie Power and others yet to be confirmed.

This year our festival-retreat-conference will be held in the beautiful location of Wells House & Gardens in County Wexford. https://wellshouse.ie Any queries or questions email herbfeastireland@gmail.com. Looking forward to seeing you all at HerbFeast 2023!

> Best wishes, Vilma and John, HerbFeast2023 organisers

LOCATION: Wells House & Gardens, County Wexford, Ireland

DATE & TIME: 19th to 21st May 2023



COMMUNITY ACTION TEAM UPDATES

HERBAL ALLIANCE PROGRESS REPORT

EDUCATION CAT

The education CAT brings together, maybe for the first time, many different training schools in herbalism. This diversity of trainings and practice is a fertile ground for finding shared passions, potential opportunities for collaboration and discussing how we can be part of

how the profession of herbalists evolves. The question of 'what is a herbalist' is constantly evolving and everyone in the group is excited about broadening out the profession, making it more inclusive, weaving in more collaborations and, in general, growing and building strength in the community of herbalists. Historically the profession of herbalism has suffered through partisanism - our meetings give me trust and hope that we are moving beyond this into a new era for herbalists.

Nathaniel Hughes School of Intuitive Herbalism WWW.SCHOOLOFINTUITIVEHERBALISM.WEEDSINTHEHEART.ORG.UK

Purposes of education CAT

February 2023

sub-projects with brackets

Evolution of the herbal profession

Exploring our roles in that and how our pedagogy

evolves alongside this

Community accreditation

A gradual exploration of genuine participatory governance and peer accreditation. Development of diverse, roots up competencies models

> Student centred paths Exploring and supporting individual accreditation pathways

Supporting each other as educators

Finding deep value in the support we can give each other and the nourishment that comes from spending time together

Diversity

Continual movement towards greater inclusivity and learning from diversity. Moving beyond tokenism

Plant centred

Keeping the plants central to the profession.

Collaboration

Exploring how we can create a central hub for sharing courses and resources open to any students. Gradually building this over time

compiled by Nathaniel Hughes



RESEARCH CAT

In line with the theme of this issue of the Herbal Eye, discussions within the Research CAT very much revolve around answering the question of how herbalists use herbs. A research project aiming to record how herbalists practice and what outcomes they achieve was introduced in the last issue of the Herbal Eye. We are still working on this. However, we have also been talking about how to harmonise the way that herbalists share our knowledge using case reports.

Case reports are a useful way for herbalists to learn from and be inspired by each other. Understanding how and why a formula has been put together, or which advice another herbalist has found helpful for a particular health condition or patient is a valuable part of CPD. Learning from other herbalists is a meaningful way to enrich our own practice in a profession in which we often work alone. Knowledge and learning comes from life experience, and relationships with plants and people we work with, as much as from textbooks. Case reports are a valuable route for this experience to be shared with others.

The Research CAT are in the process of designing a template that can be used to ensure that case reports are standardised across the sector. This will guide herbalists to produce case reports that cover all important information and in a format that is easy to follow regardless of who has written it. There are a number of useful starting points from templates already produced by the BMJ, EHTPA and NIMH, and the aim is to produce a document that will make sense regardless of what tradition you practice within. We will circulate this template with all the professional associations within the Herbal Alliance before providing it via the Herbal Alliance members portal for all to use in herbalist-facing publications or websites. Please do reach out via the Research Group on the Herbal Alliance members portal if you are interested in this project or would like to get involved with the Research CAT.

Marion Mackonochie BSc, MSc, mCPP, Medical Herbalist and Senior Herbal Specialist at Pukka Herbs. WWW.FIELDREMEDIES.COM





INTRODUCTION & UPDATES FROM PROFESSIONAL ASSOCIATIONS

The following are submitted by Professional Associations participating with the Herbal Alliance.

BRITISH ASSOCIATION OF TRADITIONAL TIBETAN MEDICINE (BATTM)

The British Association of Traditional Tibetan Medicine (BATTM) was founded in 2004. It is a member association of the European Herbal and Traditional Medicine Practitioners Association (EHTPA). The founder members of BATTM were the late Dr Akong Tulku Rinpoche, Dr Lobsang Dhonden Soktsang and Dr Tamdin S Bradley.

The General Secretary of BATTM is Dr Brion Sweeney who is currently on sabbatical. At present Dr Tamdin S Bradley is also one of the directors of the European Herbal and Traditional Medicine Practitioners Association Council where she represents Tibetan medicine.

The purpose of BATTM is to preserve and promote the unique system of traditional Tibetan medicine.

To be a fully qualified Tibetan doctor we have to study the four medical texts called rGyudbzhi for a minimum of 7 years full time.

The first five years we have to study and memorize 40 chapters out of 156. Every year we have to go for a month of fieldwork in the Himalayan mountains to learn, collect and identify all the medicinal plants. We spend 200 hours out of every year doing this fieldwork, which comes to a total of 1000 hours over a 5 year period.

In addition to this we have to study Buddhist texts such as Shantideva's Guide to the Bodhisattva's Way of Life which was written in India in the 8th century. This text is especially useful for mind training and for doctors to cultivate more patience and generate compassion towards their patients. Every morning we also have to do 30 minutes Medicine Buddha prayers and mantra recitation. In the final year of training we receive a Medicine Buddha initiation which helps to increase our healing powers and also serves as a blessing.

The sixth and the seventh years are spent in one of the branch clinics of the Tibetan medical Institute for a two-year internship under the guidance of senior doctors. Whilst there, we observe how to perform urinalysis, how to feel the pulses and how to deal with different kinds of patients. We spend around 4576 hours undergoing this form of training during the two years internship.

On completion of the training we are awarded a certificate as a fully qualified Tibetan doctor - sMenpa - Karchupa.

WWW.BATTM.ORG

REGISTER OF CHINESE HERBAL MEDICINE

Writing an update in Springtime is always a pleasure, as the rising Yang of the year brings with it new positivity, growth and enthusiasm. At the RCHM we are looking at building on this energy



of Chinese Herbal Medicine

by strengthening connections within our membership and holding a member's day at our Chinese Herb Garden at the University of Bristol on 7th May. We will be touring the garden,



harvesting Tong Cao together (the pith of *Tetrapanax Papyriferi*), hearing some research updates and generally enjoying a day of community around our love of Chinese Herbs.

In June, we are looking forward to holding our first in-person conference for several years. This promises to be an exciting event, with a keynote lecture by our eminent member Mazin Al-Khafaji. We have been hearing from various members how much they miss the personal connections and social aspects which come with meeting with fellow herbalists from our community, and hope that 2023 is the year when we can bring the personal aspect back into focus.

As always, a large part of our work is PR, as we constantly strive to share the effects of our wonderful medicine with the public and outside stakeholders. We have recently been focusing on the issue of fertility companies advising their IVF patients to not use herbal medicines while undergoing treatment with them. This is a great shame as more and more research is showing that using individualised Chinese Herbal Medicine with high quality herbs (such as the ones coming from one of our Approved Suppliers) improves the outcomes of IVF, sometimes significantly so. The RCHM has published a letter, co-signed by the EHTPA, and supported by research studies, that we sent to a fertility company. The letter is available on this page, <u>https://rchm.co.uk/journalists</u>, and we are encouraging our members to disseminate this letter and associated studies to the public and particularly to their fertility patients. We are hoping that this will help to increase treatment options for patients looking for effective fertility treatment.

Finally, after 3 years in my position, I have recently announced my resignation from my role of chief executive at the RCHM. Working to support our members and our profession during this time has been a joy and tremendously fulfilling, however it is time for me to refocus my energies on my own practice and family. I look forward to ensuring a smooth handover with my successor so the RCHM can carry on fulfilling its vital role for our community. Wishing everybody a wonderful festive season.

Conny Cooper RCHM CEO WWW.RCHM.CO.UK

IRISH REGISTER OF HERBALISTS

SUSTAINABILITY THE FUTURE IS NOW

"Sustainability consists of fulfilling the needs of current generations without compromising the needs of future generations, while ensuring a balance between economic growth, environmental care and social well-being."

As herbalists and plant lovers, what does the notion of sustainability mean to us?



Irish Register Of Herbalists

Clár Éireannach na Luibheolaithe

- What if our herbal suppliers were to tell us that a particular herb or plant, teas or tinctures were out of stock or unavailable? Usually you would try another supplier, but what happens if they don't have stock either?

If the past couple of difficult years has taught us anything, it has highlighted the unpredictability of sourcing raw materials, and seeds are no different.

In 2020/2021 when St. Anne's Physic Garden placed an order for organic medicinal seeds with our suppliers in the USA and the UK, we were informed that they were only supplying



their own domestic markets and would not be exporting any seeds. This rang alarm bells because our main source of organic medicinal seeds was cut off from us.

As herbalists, regardless of what tradition we hail from, we should never lose sight of the fact that the primary ingredient for all our products comes from a seed. Without seeds the herbal preparations we purchase will disappear over time as stocks dwindle.

The Irish Register of Herbalists (IRH) is at present working on a plan to have an organic medicinal seed bank in place by the end of 2024. This seems like a major task. Our St. Anne's Physic Garden has now started the second year of a conversion plan to gain full Organic Certification under the guidance of the Irish Organic Association (IOA). Although we have always practiced under the Organic Ethos, we are now working with the IOA to obtain full organic certification.

One of our volunteer herbalists from the Physic Garden is also completing a course with the Irish Seed Savers Association, which is based in Scariff, Co. Clare, for best practice and procedures for saving seeds successfully in our damp Irish climate. Hopefully we can gain the knowledge, skill, competence and confidence to plan for the future. All this means a lot more work for our dedicated volunteers in the Physic Garden, who all share the same passion for sustainability.

The IRH will hope to have a stock of organic seeds which will be made available to all our members, and all herbalists who share the same ethos.

The road ahead will have many twists and turns to put this plan of a seed bank into action. The IRH are in early stage talks with Dublin City Council who own the site where St. Anne's Physic Garden is located, and who are our initial joint partners in setting up the garden. We hope to acquire a designated space within St. Anne's Park to house this collection of seeds as a proper storage facility, which will be critical if the plan is to be a success.

John Maher FIRH You can contact the IRH at irh@irh.ie WWW.IRH.IE

WHY PRESCIBING SUSTAINABLE HERBS MATTERS

s a student of herbal medicine, I had been struck by the contradictions within herbal medicine. Herbalists explained that intention when harvesting plants and preparing remedies was part of the healing power of a plant. Yet few discussed the challenge of sourcing enough plants to meet demand. They emphasized how a practitioner's relationship with a plant was as important to healing as the constituents of the plant, but then recommended remedies produced no differently from any other commodity on the market.

I created the Sustainable Herbs Program to tell the stories of the people and plants behind the products on the shelves. I wanted to explore:

In what ways does understanding the lives of stakeholders in the herb industry matter?

By understanding their stories, can we begin to reconnect relationships the economy has severed? How does knowing where herbs come from relate to

Sustaínable Herbs Program American Botanical Council

healing? What do concepts like intention and quality control mean down the supply chain?

How do different stakeholders negotiate these meanings?

And how does any of this impact the quality of the finished product?

I conceived of the Sustainable Herbs Program to inspire change in the herbal products

industry. The first step of any change, however, involves



understanding the system and the stakeholders involved. My book *The Business of Botanicals* recounts my journey to understand the challenges and issues in the industry from the perspective of those working in that industry, not simply as an outsider. It explores the questions that drew me to herbalism in the first place. If, as I believed, herbal medicine offers insights into how to live in right relationship with the earth, can those values stand up to capitalism? Can plants be both living entities with which humans can have a sacred relationship, *and* commodities governed by the laws of capital? If it is possible, what are the conditions that allow for right relationship within a commercial enterprise?

These same questions underlie the work of the

Sustainable Herbs Program. We produce webinars, bringing in voices and perspectives of those not always heard in discussions on key issues in sourcing herbs: certifications, the importance of data, regenerative farming, and more. We have produced a toolkit that gathers in one place best practices around implementing sustainable and regenerative practices into herb companies. And we are working to build precompetitive collaboration through a Learning Lab series that brings 20 or so stakeholders together to examine key issues more deeply and identify paths of action to address those issues.

By Ann Armbrecht, PhD

Ann is a writer and anthropologist (PhD, Harvard 1995) whose work explores the relationships between humans and the earth, most recently through her work with plants and plant medicine.

She is the author of <u>The Business of Botanicals: Exploring the Healing Promise of Plant Medicine</u> in a <u>Global Industry</u>, published by Chelsea Green Books in 2021. She is also the co-producer of the documentary <u>Numen: the Nature of Plants</u>, and the author of the award winning ethnographic memoir, <u>Thin Places: A Pilgrimage Home</u>, based on her research in Nepal. She is a student of herbal medicine and was a 2017 Fulbright-Nehru Scholar documenting the supply chain of medicinal plants in India. She lives with her family in central Vermont.

Why Prescribing Sustainable Herbs Matters A Conference for Clinical Practitioners Thursday, April 27, 2023 US: 10 am-2 pm (EDT) ~ UK: 3 pm-7 pm (BST) Online via Zoom

> Sustainability & Regenerative Practices **TOOLKIT** VERSION 2.0

> > Sustainable Herbs Program AMRICAN BOTANICAL COUNCIL

MARCH 2023



This article was first published on Herbal Reality on the 27th September 2022

SUSTAINABILITY

EXTINCTION THREATS AND CITES PROTECTION: RHODIOLA AS A CASE STUDY

By Sonia Dhanda

2022 marks the nineteenth World Wildlife Conference. Nations from all over the world will meet to enhance the regulation of wildlife trade, defined as the transaction of wild plant and animal resources by humans. Global biodiversity policies exist to protect nature, one such policy is the Convention on International Trade of Endangered Species (CITES), and many medicinal plants are protected by CITES. Medicinal plants are often sustainably harvested from the wild, however, many species are at threat from overexploitation. The collection and trade of wild plants is an important natural resource or source of income for millions of people making this a vital issue for both people and plants.

WHAT IS THE WORLD WILDLIFE CONFERENCE?

CITES is a global wildlife policy agreement, created in 1975, set up to address the extinction

crisis by facilitating the international trade of plants and animals through a permitting system and regulations.

The convention aims to ensure the trade of wild species is non-detrimental to their wild populations by advocating for a conservation through sustainable use approach. There are around 38,700 species, 5,950 species of animals, and 32,800 species of plants, protected by CITES. Plants and their products are regulated in international trade for uses such as health care, building materials, ornamental use, furniture, food, and cosmetics.

CITES has 184 countries and states that collectively meet to review the progress of species conservation, amend CITES regulations, and review the problems and success of implementing the legislation. A CITES COP is usually held every 3 years and is a critical meeting for wildlife conservation.



The 19th meeting of the Conference of the Parties to the Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES CoP19) is taking place in Panama City, Panama in November 2022.

CITES AND MEDICINAL PLANTS

CITES regulates at least 1,280 species of medicinal and aromatic plants (1). There is a CITES working programme on medicinal and aromatic plants, along with proposals to add medicinal plants to CITES regulations. There has been a call to engage with stakeholders and consumers in the medicinal and aromatic plant industry. The actions are to enhance awareness of CITES regulations and strengthen the legal trade of medicinal plants. There are also actions to evaluate the scientific data required to facilitate sustainable trade and understand the trade value chains of medicinal plant species.

Signatories to the convention are required to make sustainability assessments when exporting CITES plants to ensure wild populations are not at threat from overharvesting. The sustainability finding is known as a Non-Detriment Finding and CITES signatories have guidance in place to conduct these assessments. The type of data analysed includes the taxonomy, conservation status, the source, trade volumes, threats to the species, evaluating available harvesting or management plans for the species, and understanding the regeneration and ecology of the species. The CITES signatories have been discussing frankincense (Boswellia) species in detail and gathering information on its biology and trade. There are concerns that many species of Boswellia are at threat and issues of identification and lookalike species such as myrrh (Commiphora) species. The dialogues suggest further consultations are required but the harvesting and trade of this genus likely meet the criteria to be listed on CITES, however, this has not been proposed for this year's World Wildlife Conference.

HOW IS A SPECIES LISTED ON CITES?

CITES is known as a science-based convention. There are criteria for listing species on CITES and species must meet certain biological and trade criteria. This year, a proposal for golden root or roseroot (*Rhodiola* spp.) to be regulated



Boswellia

on CITES has been submitted by China, the EU, Ukraine, the UK, and the USA. *Rhodiola* is native to the Subarctic and Subalpine Northern Hemisphere, the taxonomy of the genus is unresolved, however, 69 accepted species have been recorded on the scientific database called the World Checklist of Vascular Plants (2). *Rhodiola rosea* is valued in ornamental trade and gardens however it is being proposed for CITES regulations because of the medicinal plant trade. *Rhodiola rosea* has a long history of medicinal use for health benefits related to stress-related fatigue and physical and mental performance enhancement (3).

For a species to be regulated on CITES, one or more countries may put forward a CITES species listing proposal. The species must be endemic to some of the countries who put forward the proposal with details outlining the taxonomy of the species, distribution, habitat, biological characteristics, morphological characteristics, ecological role, population size and trends, its utilisation, parts or products in trade, legal and illegal trade, management, monitoring measures and more. The proposal should be consulted with any country which has this as a native species The signatories of CITES review



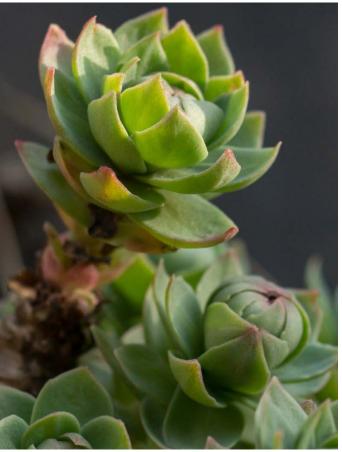
the proposal, and a two-thirds majority vote is required to accept a proposal.

CITES advocates for regulating the part or product in trade, which is exported from the maintrade countries, often only parts of the trade chain are regulated. This part of the legislation is called the annotation. The *Rhodiola* proposal has suggested listing the genus to regulate all parts and derivatives except seeds and pollen and finished products packaged and ready for the retail trade. This proposal intends to regulate *Rhodiola* rhizomes from the main countries of harvesting.

RHODIOLA CONSERVATION, HARVESTING AND TRADE

Rhodiola is a plant that has boomed in popularity in recent years, perhaps because of its stress supporting properties. We will use it here as an example of a plant regulated under CITES. Medicinal use of *Rhodiola* is globally documented in North America, Europe, and Central and East Asia evidenced through pharmacopeia's, ethnobotanical studies and folk medicine references (4). The main exporters of *R. rosea* are Russia for raw plant material and China for Rhodiola products, mainly derived from R. crenulata. (5). In China, there is a high diversity of Rhodiola species and 21 species of Rhodiola are used (6). Rhodiola rosea occurs naturally in 29 countries. Globally, demand for Rhodiola rosea and its compound salidroside has led to some wild populations becoming threatened (7). The conservation status of the species varies from IUCN Red List categories of Critically Endangered to Least Concern indicating harvesting threats are greater in populations in Austria, Bosnia and Herzegovina, Bulgaria, China, Czechia, Mongolia and Russia (6). In several countries, an IUCN Red List or equivalent assessment has not been undertaken due to resources or a lack of data on wild populations.

Rhodiola has been cultivated in various countries, however, it takes between 5 – 7 years for the rootstock to reach the desired maturation for harvesting (6). Cultivation is increasing but it is not fulfilling the global demand and so wild populations are continuously being harvested. There are also concerns about the adulteration of products on the market. Identification of dried rhizomes of *Rhodiola* is challenging at a species level and can be even more difficult for consumers buying processed



Rhodiola rosea

products. An authentication study of *Rhodiola rosea* products in the UK found that 50% of the supplements tested contained different species of *Rhodiola* (8). Similar evidence presented in the species proposal has led to the species listing becoming a genus listing proposal as the harvesting and trade of *Rhodiola* species appears to be indiscriminate.

SUMMARY

CITES COP19 will take place in November 2022. If the species proposals are successful, they enter into force three months after the meeting, in this case by the end of February 2023. Researchers have estimated there are at least 30,000 medicinal and aromatic plant species, and 60-90% of these plant species in trade are wild collected (9). Understanding the use, trade and supply and regeneration of medicinal plants are areas in the herbal plant industry that intersect with this global wildlife trade policy. There is value in herbalists, suppliers, and users of herbal plants to understand and engage with CITES as well as joining efforts and resources for medicinal plant conservation and ensuring these plants are accessible in the future.



Since this article has been written, CITES has proposed Rhodiola to be Schedule 2 (can only be exported with a licence).

Follow the link below to read the outcome of the CITES meeting and Rhodiola status:

https://cites.org/sites/default/files/documents/E-CoP19-Prop-45.pdf

<u>REFERENCES</u>

- Allkin R., Patmore K, Black N, Booker A, Canteiro C, Dauncery E, Edwards S, Giovanni P, Howes M-J, Hudson A, Irving I, Leon C, Williken W, Nic Lughadha E, Schippmann U, & Simmonds M. (2017). Medicinal Plants: current resource and future potential. In: State of the Worlds Plants Report, Royal Botanic Gardens. 22–29. https://stateoftheworldsplants. org/
- 2. POWO (2022). Plants of the World Online. Facilitated by the Royal Botanic Gardens, Kew. Published on the Internet; http://www.plantsoftheworldonline.org/ Retrieved 24 August 2022.
- 3. Herbal Reality. 2022. Rhodiola Rosea. Published on the Internet; https://www. herbalreality.com/herb/rhodiola/. Retrieved 24 August 2022.
- 4. Cuerrier, A., Tendland, Y., Rapinski, M., 2014. Ethnobotany and Conservation of Rhodiola Species. In: Cuerrier, A., Ampong- Nyarko, K. (Eds.), Rhodiola Rosea. CRC Press, Boca Raton, FL.
- 5. Brinckmann, J.A., Cunningham, A.B. and Harter, D.E., 2021. Running out of time to smell the roseroots: Reviewing threats and trade in wild Rhodiola rosea L. Journal of Ethnopharmacology, 269, p.113710.



Article by Sonia Dhanda

Sonia Dhanda is a policy advisor on natural resource governance. She specialises in the Convention on International Trade of Endangered Species for Wild Fauna and Flora (CITES). Additionally, she is undertaking a PhD with University College London and the Royal Botanic Gardens, Kew. Her doctoral research is

examining the conservation, culture and trade of Ayurvedic herbs in the UK as a case study of natural resource governance. Her research interests are ethnobotany, wildlife trade, medicinal plants and biocultural diversity.



TCM AYURVEDA

WESTERN HERBAL MEDICINE

Herbal Alliance Assembly ~ Sustainability Project Review Calling all Herbalists to join in this important discussion.



Friday, 24th March 2023 9.30 am - 12.30 pm (GMT) Online via Zoom

HERBALISTS AND SUSTAINABILITY: LET'S WORK TOGETHER

By Vicky Murray

Given the scale of the climate, ecological and social challenges we face today, what can the Herbal Alliance do next to support meaningful and urgent action?

This is the question that the Alliance's Supply and Sustainability Community Action Team (CAT) have been working together to answer. Our aim is to empower Alliance members to engage in solutions to these challenges.

WHY THIS PROJECT, AND WHY NOW?

When surveyed in 2021, the Alliance membership confirmed that sustainability is a top priority, and that there is a role for the Alliance to help drive awareness and action. One quoted: "We need to help one patient a time, with the bigger picture of social and environmental sustainability in mind."

This is unsurprising, given the Nature crises we face. We are on the brink of a climate tipping point where Greenhouse Gas (GHG) emissions far exceed our planet's capacity to deal with them. As a result, our planet's stable climate – that has survived for Millenia – is being compromised, and time is running out to make the necessary changes. At the same time biodiversity is in freefall – according to the UN there has been 69% average decline in wildlife populations since 1970 – and social inequalities around the world are growing ever wider.

We are living through significant moment in time. To quote Sir David Attenborough, "what we do in the next ten years will profoundly impact



the next thousand". We all have a responsibility to act. As herbalists we have a profound connection to herbs and the healing power of nature. We want to be part of the solutions, and not inadvertently contributing to the problems, or the health of all.

WHAT WE DID

So, in September 2022 the Supply and Sustainability Community Action Team (CAT) engaged with sustainability expert Vicky Murray, to undertake a sustainability review of our key sustainability challenges, and to prioritise ways to take action to address them. As a CAT we represent many different herbal traditions (Ayurvedic, TCM and Western) and with different levels of sustainability awareness - a good representation of Alliance membership. It was important to the CAT that this project represent and share learning across all herbal traditions. As one of our CAT members put it: "when you're all standing around a plant agreeing how lovely it it, there's no division."

"WHAT WE DO IN THE NEXT TEN YEARS WILL PROFOUNDLY IMPACT THE NEXT THOUSAND."

- DAVID ATTENBOROUGH

Vicky interviewed the CAT volunteer members to help understand the breadth of sustainability challenges, now and in the future, felt by herbal practitioners. She also visited some herbal clinics to see some of the challenges and potential solutions first hand. From this long list of issues, we prioritised themes and co-created action ideas to respond to these challenges during a series of online workshops from Nov – Dec 22. These ideas were presented in a survey to Alliance members during December 2022 and our action plans finalised in Jan '23.

WHAT WE LEARNT: AN OVERVIEW

UNDERSTANDING THE BIGGER PICTURE AND WHAT WE'RE AIMING FOR

Our interviews, clinic visits and member survey revealed the breadth of environmental and social sustainability issues that impact and are impacted by Herbal Practitioners.

Some themes were expected, such as the climate impact of sourcing, processing and transporting herbs, or the impact of packaging. Many important certifications to help ensure good sustainability standards were hightlighted too: Organic, FairWild, Fair Trade, the Union for Ethical Biotrade (UEBT) and Rainforest Alliance.

Other, more nuanced themes emerged too, that might not immediately be linked with sustainability, but certainly have a role in the profession's broader future viability. Themes here included the awareness and image of herbalism; for example the role social media can play (both positively and negatively), the importance of quality, affordable and accessible herbal education leading to viable career prospects, and the lack of socio-economic and racial diversity of both practitioners and patients. Many highlighted that, as our NHS is under increasing strain, there is a real opportunity for herbalism to play an important role in healthcare.

As one interviewee put it; "Herbalists need to get the message across about how valuable we are because of our knowledge and training." And another commented; "Herbalists contribute to sustainable human healthcare – our herbs work, we help make people well... it's Earth Centred Medicine"

Financial sustainability of the profession was also a concern for many. How much practitioners felt they could charge for herbs was a key crunch point – particularly given herbalism is private medicine in a cost of living crisis and the rising costs of herbs. Questions arise such as: "What could create a shift across the herbal value chain so that everyone feels abundant?". Could we imagine a future where everyone – from local harvesters to herbal practitioners - is paid a living wage, and what would it take to get there?



There were also many overlapping themes. For example, the lack of financial sustainability in the profession was identified as a contributing factor to the lack of diversity amongst herbal practitioners. As one herbal practitioner interviewee put it, "I feel like I'm worth more than £20 per hour. We have to have privilege to work in this profession. It doesn't easily pay the bills."

The need to think about the sustainability of both locally sourced and herbs sourced from further afield was also highlighted. Tracability was noted a key driver of local sourcing. As one interviewee explained; "The struggles of getting herbs from Europe prompted us to think about growing them ourselves. Being able to control from start to finish. We have full traceability, we know where it's come from, who harvested, how and when." And others highlighted the need follow best practice in both quality and sustainability whatever the origin of herbs; "There's talk of local being more sustainable - we need to contextualise that. Just because it comes from nearby doesn't mean it's better quality. It might not be dried or harvested properly. It could be lower yield. Let's challenge 'local is *always* better'".

We also spent some time together as a CAT building what we called 'The Dream' – our initial thoughts on an ideal state – from the fields where herbs are grown, harvested or collected, right through every stage of the value chain to their disposal (See figure p.27).

Our priority sustainability themes

We identified the following 6 issues and topics to be high priority for Herbal Practitioners; ie those that emerged as the most relevant in terms of the importance of the issue and the ability of Herbal Practitioners to control and/or respond to it:

Building practitioner awareness of sustainability issues and impacts; Many practitioners we spoke to expressed a desire to understand more about the breadth and depth of sustainability issues impacting the herbal 'value chain' (from field, processing right through to packaging and end use). Developing common understanding will provide a solid basis for action across our community.

Security of supply: Continued availability of quality herbs was a challenge highlighted by all herbal practitioners we interviewed and visited.



We see many supply challenges on the horizon we need to be prepared for – whether that be due to the climate crisis, overharvesting, the welfare of pickers and collectors, endangered species or any other issues impacting the availability of our materia medica.

Deepening connection + dialogue between herbal practitioners and suppliers: Taking action on sustainability will require collaboration and collective effort. Transparency between practitioners and suppliers was highlighted as a key enabler to action on sustainability – where do herbs come from, what are the challenges involved in harvesting and processing, what are our common goals for a sustainable future and how might we work together?

Biodiversity: The importance of organic sourcing to promote biodiversity, guidance on how to source sustainable ingredients and how to protect pollinators were all identified as a key focus for herbal practitioners.

Packaging: With growing, and often conflicting, awareness of the impacts of packaging – many practitioners we spoke to asked for guidance on sustainable packaging. Sub topics include how to reduce packaging, source sustainably and dispose of responsibly.

Climate Action: We live in unprecedented times. We need to take urgent action to understand and reduce our climate impacts as Herbal Practitioners, to play our part in addressing this global crisis.

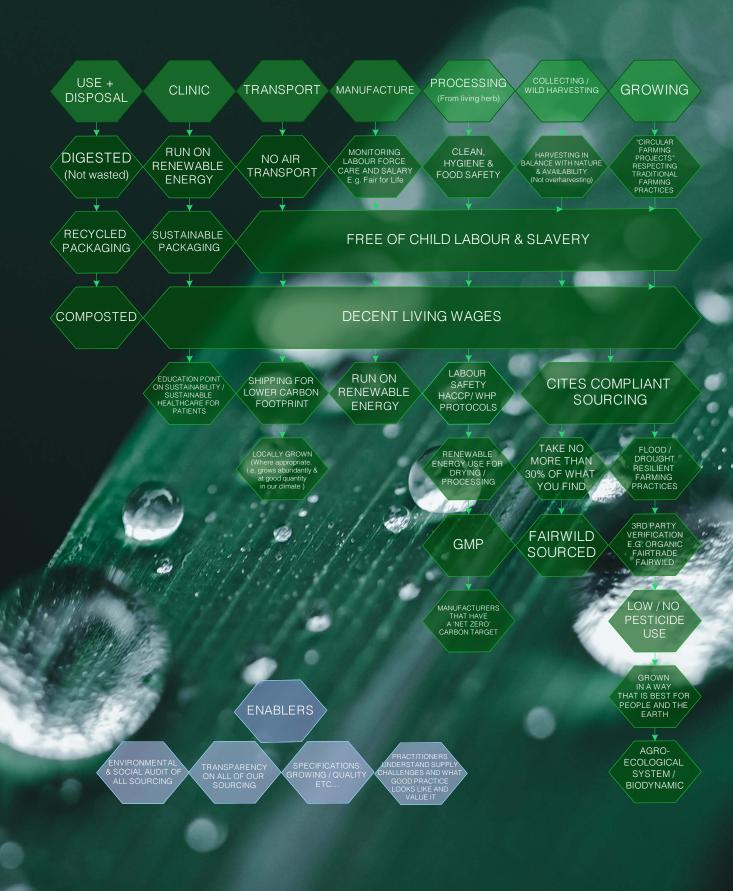
Our emerging action plans

In response to these themes, the CAT have developed a suite of action plans for the next 12 months:

A Sustainability Training Module: we will develop a module for all colleges to use as a part of their core curriculum that can also be used for CPD to educate herbalists already qualified. The module will help Herbal Practitioners understand the key sustainability challenges and opportunities in the herbal value chain, and how to address them. This project will introduce a harmonised approach to the core curriculum.

Agreeing a Sustainability & Quality Definition: as

a CAT we have developed a deep understanding that quality and sustainability belong side by side. Good sustainability credentials help drive



up the quality of our herbs, and a herb cannot be defined as good quality unless it meets recognised environmental, social and economic standards. We have developed a sustainability definition and are drafting complementary guidelines.

A Supplier Question List: we will develop an open-source list of questions that Herbal Practitioner can use to help understand the sustainability (and quality) credentials of suppliers.

A Top 20 'at Risk' Herbs List: We plan to compile a list of the Top 20 known herbs to be most at risk from an availability point of view (whether due to overharvesting, climate events or other reasons). For the 'at risk' herbs we'll aim to offer alternatives that can be sourced sustainably and review annually.

Developing Sustainable Sourcing Guidelines: A longer term goals and a culmination of our action plans we aim to compile sourcing guidelines to help Herbal Practitioners source herbs in the most sustainable way.

Our engaged members really want to get involved in taking action.

Our Alliance Member survey revealed that 40% of members want to get involved by participating

in action groups, funding future action on sustainability or sharing their own expertise. It also confirmed that our herbal practitioner peers were already taking action on sustainable packaging as well as sourcing and growing herbs sustainably – although many asked for more guidance.

Of course, engaging our colleagues and future herbalists who aren't aware of these issues and not yet taking action will be essential if we are to make a positive impact across our profession. This is why many of the actions that we prioritised involve awareness raising, education and inspiring others.

What's next and how to get involved.

Our volunteer 'Action owners' will take personal responsibility for ensuring each action maintains momentum, involving CAT members and external experts as appropriate to develop and deliver the actions. We'll be keeping each other updated on progress at our regular CAT meetings. Our aim is for our education module to be complete by September 2023 - which many of our other action deliverables dovetail into.

There are some priority themes identified during the review where we're yet to create





action plans. These include developing a climate emergency action plan – to both reduce our collective carbon footprint but to also support herbal growers and collectors build resilience to the ever-growing challenge of producing quality herbs in a changing climate. Floods, drought, new pests and unseasonal weather are all impacting or exacerbating the already challenging security of supply of some key herbs we all rely on.

We've also not yet defined solutions to offering support and guidance on sustainable packaging to members, or where to start with tackling the biodiversity crisis (beyond sourcing organic or fair certified herbs).

If you would like to provide feedback, get involved in our current action groups, or are keen to help build actions and solutions to our outstanding priority areas across the Alliance we'd love to hear from you. We're also happy to present our review findings across Practitioner Associations and other organisations. Do please get in touch: info@herbalalliance.uk To read the herbal alliance sustainability review final report, please visit:

https://www.portal.herbalalliance.uk/groups/ supply-sustainability/

Thank you to all our supporters and volunteers at The Herbal Alliance who have helped this project; Pia Al Khafaji, Avicenna, Sue Copeman, NIMH, Chris Etheridge, CPP, EHTPA, Lorraine Hodgkinson RCHM, Sebastian Pole, APA, RCHM, URHP, Tiarnan O'Sullivan, NIMH, Jane Wallwork NIMH, David Whitley, Ayurvedic Trade Association, Betonica School of Herbal Medicine, SourcePoint TCM and Acupuncture Clinic, The Sustainable Health Centre.

And to the BHMA, EHTPA and CPP for generous funding.

Article by Vicky Murray

Vicky Murray is a freelance sustainability advisor and worked with the Herbal Supply and Sustainability CAT on this sustainability review. Having led sustainability projects at Pukka Herbs and before that at Neal's Yard Remedies she has a deep knowledge in the sustainability of herbal supply chains and a profound love of herbs. She specialises in facilitating organisations and groups through processes to understand their response to complex sustainability challenges, and to take action. She lives with her family in North Devon.

You can find her on LinkedIn: https://www.linkedin.com/in/murrayvicky/



MONOGRAPH

This article was first published on the eHerbalist Summer 2021

HU-SUI CORIANDER Coriandrum sativum

FAMILY: COMMON NAMES: SANSKRIT:

Apiaceae Coriander, Chinese parsley, cilantro Dhanika



Il of the plant is edible, but its fresh leaves and dried seeds are the two parts most traditionally used in cooking. Thai cookery favours its roots.

Coriander grows wild in an extensive area from Western Asia to Southern Europe. It is hard to define exactly when this plant went from wild to cultivated, but fifteen desiccated mericarps were found in the Neolithic level at the Nahalhemar Cave in Israel. These may well be some of the oldest archaeological traces of coriander. About half a litre of coriander mericarps were also recovered from the tomb of Tutankhamen, and, because this plant does not grow wild in Egypt, this has been taken as proof that the coriander plant was being cultivated to some degree by the ancient Egyptians.

An Egyptian medical text called the Ebers Papyrus has been dated to around 1550 BC, and in it, its author describes the medicinal and culinary uses of this plant.





Today, coriander is often used with chillies, garlic and other hot spices; this is because coriander has both cooling and carminative effects on digestion.

That being said, using too much of this plant (as a food) is also said to produce ill effects. Chinese medicine considers the consumption of coriander to counteract the effectiveness of some herbs, particularly those given to improve fertility.

Today, the main countries of coriander production include: India, Iran, Russia and Central America.

Mass cultivation has made this one of the most popular herbs in the world. This plant has become so popular these days, that you can easily find it potted and sold in supermarkets, and fresh leaves are available virtually all year around.

So, what's the best way to use Coriander leaves and seeds in your kitchen? Well, if you like the taste and smell, you may well use it as a garnish in curry dishes or other Asian dishes. You may prefer to eat it in a salad or even by itself! If you are a lover of hot spices this herb can be a wonderful ally for you as its seeds (dried) have an amazing ability to calm body heat; therefore it's used to calm many disorders of Pitta dosha in Ayurveda.

Ayurveda recommends Coriander for soothing digestive problems as well as pacifying skin problems, particularly those caused by Pitta (heat) aggravation. The Chinese say of coriander – it is calmative, corrective and calming, it is recommended in ptomaine (food poisoning) and strongly counteracts the effect of venom. It also pacifies acid reflux and may be used freely under such circumstances.

One popular way of using this herb is to mix its seeds with Cumin

and Fennel and boil in water. This combination addresses all three doshas.

Lastly, coriander can be very effective if pasted and applied topically, being especially good for reducing itching, inflammation, bites, cuts and grazes.



Atsuko Mason was born in Shiga Prefecture, Japan. She relocated to the United Kingdom in 2002, qualified in Ayurveda in 2008. Since the mid 20's, she has had a deep interest in the alternative medicine and healing arts of Asia. Then recently started learning Jindai Moji calligraphy (Japanese ancient scripts/Dragon Script) for healing (qualified in Japan). She currently resides in the South West of England with her husband and daughter.





This article was first published on Herbal Reality on the 29th October 2021

FIRST DO NO HARM: A CALL FOR SUSTAINABLE HERBALISM IN CLINICAL PRACTICE CELTIC HERBAL MEDICINE

By Josef A. Brinckmann



FIRST, DO NO HARM... NEITHER TO THE PATIENTS NOR TO THE NATURAL HABITATS OF MEDICINAL PLANTS

s a medicinal plant researcher, I (really) enjoy digging around in the intersections of traditional medical knowledge, biogeography, ethnoecology, conservation biology, history of trade, and archaeobotany. Over thirty years ago, when working in San Francisco at the community clinic of the American College of Traditional Chinese Medicine (ACTCM), I wondered about the geographic origins, the ecosystems, the lives of the people, where the several hundreds of dried medicinal plants in our pharmacy came from. The herbs were simply procured from importer/traders in Chinatown. No traceability to a specific production site back then. Those importer/traders had procured the herbs from their counterpart exporter/traders, far across the ocean in China, the world's most populous country and third largest country in terms of area. End of story...



...until around the start of the 21st century... by the early 2000's, botanical supply chain visibility (transparency and traceability) into verifiably sustainable production sites around the world, gradually became more-and-more possible with the emergence of credible international voluntary sustainability standards (VSS),¹ some that were designed specifically for medicinal plants, coupled with the emergence of good agricultural and collection practice (GACP) standards for medicinal plants.² Nearly impenetrable since colonial times, the veil of botanical supply chain secrecy was slowly being lifted.

About ten years ago, after having worked on a medicinal plant sustainable production initiative in China,³ I brought a Chinese delegation to ACTCM, including representatives from the World Wide Fund for Nature (WWF China), the State Forestry Administration of China, and Chengdu University of TCM, to discuss a proposed new curriculum that aimed to educate TCM students and practitioners on the conservation status and sustainability of medicinal plants used in clinical practice, and other innovations to modernize formulations in order to substitute the use of animal ingredients with sustainably harvested plants.⁴

"While I am a proponent of local self-reliance, especially local food, in the case of herbal medicine, I think it may be a bit more complicated for the busy clinician serving an urban population."

WHEN HERBS BECAME TRACEABLE

By the 2010's, significantly increasing quantities of medicinal plants in global trade were becoming traceable to specific harvest sites, to the commercial enterprises managing the harvest, and the people who handle and process the herbs throughout the value chain. This new reality was one of the positive outcomes of a consumer-driven market trend that had been growing slowly but steadily since the 1990's, driving increased demand for herbs that are harvested, handled, processed, and traded sustainably, as determined by audits of independent third-party inspection and certification organizations.⁵

INTRODUCING CERTIFICATION AND LABELS

In the 2020's, while not common enough (yet!), it is also not rare for herbal medicinal raw material batches to be traded between companies with documentary evidence of sustainable production (albeit for discerning customers willing to pay the fair price), i.e., with certification(s) showing compliance with one or more VSS, such as the:

- Organic Wild-crop Harvesting Practice Standard,⁶
- FairWild® Standard,⁷
- Ethical BioTrade Standard,⁸
- Fair For Life Standard,⁹
- Fairtrade International Standard For Herbs, Herbal Teas & Spices,¹⁰ and/or
- Fair Trade USA Agricultural Practice Standard,¹¹

as well as wildlife-friendly standards such as the:

- Certified Elephant Friendly[™] Standards,¹² and the
- Giant Panda Friendly Products Standard,¹³ among others.

THE SUSTAINABLE HERB TRADE IN THE HERBAL PRACTICE

While VSS certification logos are increasingly visible on consumer herbal healthcare product labels at retail, it is not as clear how practitioners and patients can participate in the sustainable herb trade in the clinical setting. If every medical herbalist were able to dispense safe and effective medicines, prepared from local native species, obtained from (verifiably) sustainable wild collection operations or from local medicinal plant farms that follow biodynamic,¹⁴ or permaculture, or regenerative organic agricultural practices,¹⁵ that would be awesome, would it not?

While I am a proponent of local self-reliance, especially local food, in the case of herbal medicine, I think it may be a bit more complicated for the busy clinician serving an



urban population. Of course, the situation varies by region. In the United Kingdom, some medical herbalists do maintain dispensaries of 100 to 200 herbs, prepare their own tinctures and mixtures of dried herbs for preparation as decoctions or infusions. On the other hand, here in California, many (possibly most) herbalists, whether they practice as a licensed acupuncturist (LAc), Ayurvedic doctor (AyD), naturopathic doctor (ND), or certified nurse midwife (CNM), do not generally stock dried herbs in their private practice. Generally, they stock a small range of packaged "professional products", supplied by selected trusted brands that primarily service practitioner's clinics – with products that are not commercially available in retail shops. Practitioners also recommend selected commercially available herbal products that the patient can pick up at a natural food store or purchase online for home delivery.



Furthermore, there are TCM compounding pharmacies, which enable the LAc to login,



enter the prescribed formula with the patient's details, for same day pick-up or delivery. While such practices are understandable, they can place a greater distance between the herbalist and the herbs – and the ability to know, with any degree of certainty, when, where and how the herbs were harvested, by whom, and under what conditions.

THE REALITY IN THE HERBAL CLINIC

In reality – many practitioners are serving urban patient populations, and do not live in a megadiverse ecozone – one that could keep their dispensaries stocked with the possibly hundreds of medicinal plants needed for formulations. The fact is that apothecaries and clinics in Europe and the Americas have relied on a range of imported herbs for many hundreds of years. Even China, where most herbs used in TCM, until recent years, were harvested within China, has become an importer of some herbs. Due to dwindling plant populations, certain herbs are being imported into China from neighboring countries, especially from Vietnam,¹⁶ Bhutan, Nepal,¹⁷ Kazakhstan, and Russian Federation.¹⁸

I hesitate to recommend a practice that I could not practice myself. Most of the medicinal plants that I choose to use – as healthy food or as medicine (or both!) – do not occur in Northern California, nor would many of them grow well here if transplanted. If I insisted on using only local herbs for food and medicine, I would need to move, far away! To illustrate this point:

- Firstly, food and beverage: the CNS stimulant Arabica coffee that I drink in the morning is native to tropical forests of Ethiopia and Sudan¹⁹ (but introduced and grown in forests of Central- and South America). The carminative and stomachic cardamom seed that I mix in the coffee, is native to rainforests of the Western Ghats region of South India.²⁰ And, the carminative and stomachic cinnamon tree bark, sprinkled on morning toast, comes from forests of Indonesia, Vietnam, and Southern China.²¹
 - Secondly, preventive medicine: the extract of wild bilberry fruit, that I take to improve microcirculation, is native to forests of Europe. And the turmeric rhizome, taken as an anti-inflammatory, originates from the Indo-Malayan Region of southern and

southeastern Asia.

Thirdly, treatment: when a sore throat is coming on, I rely on a Chinese preparation 'chuan xin lian' antiphlogistic pills (andrographis herb, isatis root, and Mongolian dandelion herb). And for allergic rhinitis symptoms, I experience good results with a 12-herb formulation 'bi yan pian' nose inflammation pills (magnolia flower, xanthium fruit, phellodendron bark. forsythia fruit, liquorice root. schisandra fruit, anemarrhena rhizome, chrysanthemum flower, schizonepeta herb, platycodon root, fragrant angelica root, siler root).



None of the aforementioned daily – or occasional – use botanicals in my cupboard or home medicine chest are produced anywhere near my neck of the woods. What is the herbal practitioner and patient to do? – to have some certainty, that the herbs, having travelled from distant deserts, meadows or forests to the clinic or pharmacy (or kitchen), have been harvested non-destructively, without detriment to the survival of the species, or its pollinators, or to any of the flora and fauna that share habitat. How do the practitioner and patient know if the herbs were valued fairly and traded ethically, not dependent on exploitive labor of marginalized people to keep the prices low?

HERBS WITH EVIDENCE ONLY?

Likely an overwhelming feeling, for an individual practitioner, to aim towards dispensing herbal medicinal preparations, composed only of herbs that possess documentary evidence of sustainable production.

Firstly, you are not alone in this. Fortunately, much (but not enough) progress has been made in recent decades with the advent of VSS that have been designed with medicinal plants in mind, whether wild-collected or grown on farms. Secondly, be curious enough to ask your bulk herb and herbal product supplier(s) tough questions about the herbs. Thirdly, be insistent enough to encourage answers. You can also ask your preferred supplier(s) to begin stocking certified fair and organic dried herbs and herbal medicinal products on your behalf – bolstered by your commitment to pay the premium that covers the cost of sustainable production. Uncertified, undocumented, non-traceable herbs will, of course, cost less. The assurance of sustainable and ethical production is important in my view, in part, because I believe that the medicine is impacted in some way by every person who has handled it on its journey from the alpine forest or the semi-arid steppe to the urban clinic. No person in the natural medicine value chain should be struggling in abject poverty or be subject to exploitive labor and trade practices, nor should the natural environment be damaged, in the course of bringing medicinal herbs to the clinic for the health and wellbeing of the client or patient.

Today, there are increasing numbers of small-tomedium-size distributors, making some visible level of commitment to sustainable herbs, that service cottage industry, small health food or herb shops with bulk bins, and individual practitioners. The practitioner can find these progressive handlers in the databases of the standards-setting-organizations. For example, one can find information on the certified producers and registered processors and traders operating in the FairWild trading system here: www.fairwild.org/fairwild-participants.

Certificate holders in the Union for Ethical BioTrade Programme can be found here: www.ethicalbiotrade.org/certificate-holders. And details on certified operations in the



Fair for Life – Social & Fair Trade Certification Programme are provided here: www.fairforlife.org/pmws/indexDOM. php?client_id=fairforlife&page_ id=certified&lang_iso639=en.

However, for "voluntary" sustainability standards to be part of the solution, clients, consumers, patients, everyone, must also "voluntarily" agree to pay higher prices to cover the true costs of sustainable production, equitable and ethical trade. It is not free. The costs for an herb production operation to implement standards with annual audits and fees for inspection and certification, and the additional personnel needed to manage standards compliance, is not insignificant.

You may not be able to prescribe certified sustainable herbs and formulations straight away. Be pragmatic, start small and build gradually. Pick one herb at a time, to get better acquainted with, then another, and so on. In my experience, once I started looking into this fascinating area of sustainable resource management in the botanical supply chain, it was not long before I was hooked. No turning back! Enjoy the journey.



Article by Josef A. Brinckmann

Since 1979, I have worked at all levels of the medicinal plant sector; organic farm and wild collection, production of extracts, manufacturing of finished herbal medicinal products, TCM clinic, standards-setting (quality and sustainability), and consulting governmental- and intergovernmental organizations in sustainable development and biodiversity conservation projects in Africa, Asia, and South America.

From 2002 to 2016, I served as International Consultant on Market Intelligence for Medicinal Plants at the International Trade Centre, the joint agency of the World Trade Organization and the United Nations; 2004-2008 as a member of the International Standard for the Sustainable Wild Collection of Medicinal and Aromatic Plants (ISSC-MAP) Steering Group; and 2008-2021 as a member of the Board of Trustees of the FairWild Foundation, a standards setting organization for sustainable wild collection of medicinal plants. I presently serve as Research Fellow for Medicinal Plants and Botanical Supply Chain at Traditional Medicinals (Sebastopol, California). I am an elected member of the United States Pharmacopoeia Botanical Dietary Supplements and Herbal Medicines Expert Committee. At the American Herbal Pharmacopoeia, I am an advisor on commercial sources & handling and international regulatory status. I serve as an Advisory Board member of the American Botanical Council and Advisory Group member of ABC's Sustainable Herbs Program. In 2016, I was conferred an honorary degree of Doctor of Humane Letters in Healing and Sustainability honoris causa from the American College of Traditional Chinese Medicine and California Institute of Integral Studies.



<u>References</u>

- 1. Brinckmann JA. The long road to sustainable licorice. Journal of Medicinal Plant Conservation. Spring 2020:19-21. Available at: https://unitedplantsavers.org/ups-journal-2020/.
- World Health Organization. WHO Guidelines on Good Agricultural and Collection Practices (GACP) for Medicinal Plants. Geneva, Switzerland: World Health Organization; 2003. Available at: https://www.who.int/medicines/publications/ traditional/gacp2004/en/.
- 3. Brinckmann JA, Morgan B. Linking a wild medicinal plant cooperative to socially responsible companies: Experiences from China and USA. In: Asen A, Savenije H, Schmidt F, eds. Good Business: Making Private Investments Work for Tropical Forests. Wageningen, the Netherlands: Tropenbos International; December 2012:54: 73-80. Available at: http://www.etfrn. org/publications/good+business+making+private+investments+work+for+tropical+forests.
- 4. Larson B. ACTCM meets with delegates from China to discuss innovative herbal curriculum pilot. American College of Traditional Chinese Medicine Blog. 01 February 2011; Available at: https://www.actcm.edu/blog/blog/actcm-meets-with-delegates-from-china-to-discuss-innovative-herbal-curriculum-pilot.
- 5. Brinckmann JA. Sustainable Sourcing: Markets for Certified Chinese Medicinal and Aromatic Plants. Geneva, Switzerland: International Trade Centre (ITC); 2016; Available at: https://www.intracen.org/publication/Sustainable-Sourcing/.
- 6. United States Department of Agriculture. NOP 5022 Wild Crop Harvesting Internal Rev01 07 22 11. Washington, D.C.: United States Department of Agriculture; 22 July 2011. Available at: https://www.ams.usda.gov/sites/default/files/media/5022.pdf.
- 7. FairWild Foundation. FairWild Standard: Version 2.0. Weinfelden, Switzerland: FairWild Foundation; 2010; Available at: https://www.fairwild.org/the-fairwild-standard.
- 8. Union for Ethical BioTrade. Ethical BioTrade Standard. Amsterdam, The Netherlands: Union for Ethical BioTrade; 2020; Available at: https://www.ethicalbiotrade.org/resource-pages/standard.
- Ecocert SA. Fair for Life Certification Standard for Fair Trade and Responsible Supply-chains. L'Isle Jourdain, France: Ecocert SA; 2020; Available at: https://www.fairforlife.org/pmws/indexDOM.php?client_id=fairforlife&page_id=root_2_3&lang_ iso639=en.
- Fairtrade International. Fairtrade Standard for Herbs, Herbal Teas & Spices for Small Producer Organizations and Traders. Current version: 01.05.2011_v1.2. Bonn, Germany: Fairtrade International; 2011; Available at: https://www.fairtradeamerica. org/app/uploads/2020/08/HerbsHerbalTeasSpices_SPO_SP.pdf.
- 11. Fair Trade USA. Fair Trade Agricultural Production Standard. Version 1.1.0. Oakland, CA: Fair Trade USA; 2019. Available at: https://www.fairtradecertified.org/business/standards/documents/agricultural-production-standard.
- Wildlife Friendly Enterprise Network. Certified Elephant Friendly™ Standards. Bainbridge Island, Washington: Wildlife Friendly Enterprise Network; 2019; Available at: https://wildlifefriendly.org/wp-content/uploads/2020/01/Certified-Elephant-Friendly-Standards-FINAL-v2.1.pdf.
- 13. Brinckmann JA, Luo W, Xu Q, et al. Sustainable harvest, people and pandas: Assessing a decade of managed wild harvest and trade in Schisandra sphenanthera. J Ethnopharmacol. 2018;224:522-534. https://doi.org/510.1016/j.jep.2018.1005.1042.
- 14. Biodynamic Federation Standards Committee. Production, Processing and Labelling. International Standard for the use and certification of Demeter, Biodynamic and related trademarks. Darmstadt, Germany: Biodynamic Federation Demeter-International e.V.; 2021. Available at: https://www.demeter.net/sites/default/files/20201204_bfdi_standard_ for2021_final_sc.pdf.
- Regenerative Organic Alliance. Framework for Regenerative Organic Certified[™]. Ventura, CA: Regenerative Organic Alliance; 2021. Available at: https://regenorganic.org/wp-content/uploads/2021/02/ROC_ROC_STD_FR_v5.pdf.
- Cunningham AB, Brinckmann JA, Bi YF, et al. Paris in the spring: A review of the trade, conservation and opportunities in the shift from wild harvest to cultivation of Paris polyphylla (Trilliaceae). J. Ethnopharm. 2018/08/10/ 2018;222:208-216.
- 17. Cunningham AB, Brinckmann JA, Schippmann U, Pyakurel D. Production from both wild harvest and cultivation: The cross-border Swertia chirayita (Gentianaceae) trade. Journal of Ethnopharmacology. 2018;225:42-52.
- Brinckmann JA, Cunningham AB, Harter DEV. Running out of time to smell the roseroots: Reviewing threats and trade in wild Rhodiola rosea L. Journal of Ethnopharmacology. 2021;269:113710.
- Moat J, O'Sullivan RJ, Gole T, Davis AP. Coffea arabica (amended version of 2018 assessment). The IUCN Red List of Threatened Species 2020: e.T18289789A174149937. https://dx.doi.org/10.2305/IUCN.UK.2020-2.RLTS.T18289789A174149937. en. 2020.
- 20. ICAR-Indian Institute of Spices Research. Cardamom Extension Pamphlet. Kozhikode, Kerala: ICAR- Indian Institute of Spices Research; 2015.
- 21. Oketch-Rabah HA, Marles RJ, Brinckmann JA. Cinnamon and Cassia Nomenclature Confusion: A Challenge to the Applicability of Clinical Data. Clinical Pharmacology & Therapeutics. 2018;104(3):435-445.





STEPS TOWARDS A SUSTAINABLE DISPENSARY

Growing Medicinal Plants For Your Practice

By Marina Kesso



any of our colleagues ask us how we manage to grow and process most of the herbs we use in our clinical practice. The idea of having a sustainable dispensary certainly is appealing to most herbalists. Having the time, space and additional skills to achieve this may seem daunting to any practicing herbalist but we know there are always ways in which any herbalist can add to your repertoire of remedies without taking the full plunge into herb farmer!

Getting back to your proverbial roots as a herbalist is not only beneficial to your dispensary. It is a profoundly connecting way to engage with the plants you already have a deep appreciation and reverence for. It opens channels of communication with yourself and the plants that will enhance your work as an intermediary between the herbs and your patients.

Traditional herbal medicine practitioners will tell you never to underrate the power of simplistic remedies. The popular use of tinctures alone in clinic is indeed practical and gives us access to incredibly powerful medicines when we tailor them to the



individual. But the back to basics uses of herbal oils, liniments, creams, lotions, balms, oxymels and teas and decoctions as hand and foot baths adds a greater component to practice and to your patient's relationship with the healing process. And more importantly, to our own rapport with the plants as medicines. The use of these simple remedies empowers our patients to connect with their own healing, the art of self-care and the value of nourishing oneself towards better health.

Many of us have seen how positive this is for people. I am reminded of a patient that went from being embarrassed to make up his herbal tea mix in front of his co-workers during lunch break on the building site to proudly encouraging them all to ditch the coffee for herbals. And another patient, who loved the herbal skin cream made for her condition so much that she came to train with us and ended up going on to start her own natural skincare range. Connecting the people in our care with the plants, I feel, is fundamental to my role as a herbalists and clinician.

It is for this reason we love teaching this aspect of herbal medicine to fellow herbalists. For many years we have taught colleagues how to integrate growing medicinals and making remedies into their practice. We have had the pleasure and privilege of teaching colleagues of over 20 years' experience to new student herbalists. Each wishing to broaden their repertoire of offerings as practitioners, and to develop their own sense of what being a herbalist could mean.

SO WHAT ARE THE MOST IMPORTANT POINTS TO SHARE HERE?

The key is to start small and focus on a handful of simple remedies that you feel will add the most value to your clinic. Build your confidence working with these plants before embarking on bigger quantities or trickier plants. Some herbs grow very easily for any novice gardener while others need special care and knowledge to successfully grow them to producing medicines. So how do you decide? Firstly, ask yourself 'what do you need?' In clinic, we tend to be more au fait with using certain herbs. We feel more comfortable in our understanding of their use and this short list often become our 'go to' herbs. When we create these relationships to a particular herb, we also tend to attract the people that need that plant! Something I am sure many of you have felt in practice. Nervines are a good example. There are so many wonderful nervines yet we each tend to have our favourites.

So, take a look at your dispensary. Do you end up using multiple litres of some and less than half a litre of others in the space of a year? Are these favourites plants you could grow?

Let us take Scutellaria and Leonurus as an example. If you know you use 3 litres of Leonurus tincture a year you only need 1 plant in your garden to fulfil this! Although it is a big, tall plant it is easily grown, needs the minimal of maintenance being a perennial. Whereas to make 3 litres a year of Scutellaria tincture needs a lot more space (about 1m x 1m of preferably rich and moist ground) and very specific care to ensure it will thrive. Each year your Skullcap patch will need to be completely dug up, removing about a third of the roots and replanting the rest in the same place. This is a simple task that doesn't take much time. Without doing this each year your Scutellaria will strangle itself underground and you will end up wondering why it didn't come back or why it grows poorly the next year.

Plants of which we use aerial parts would be easiest to focus on first whereas most roots take more time to mature for harvest. There are however, some rewarding root herbs you could begin with we harvest in its first year. Growing your own Withania in a glasshouse/ polytunnel and harvesting the roots in the first winter is very rewarding. Other roots like Valeriana and Angelica spp. are also best taken up in the first year of growth as they can fail to survive our damp winters. There is nothing as strong as your own Valerian or Angelica root. For other roots like Rhodiola or Gentiana you will be waiting a number of years but in that time, you have a stunning plant to admire and connect with.

So depending on the space you have you need to decide what time you can commit to growing some herbs. I urge herbalists without much growing space to join a community garden group or rent an allotment. You would be



surprised how productive an allotment can be. A community gardening group would be more than happy to take on growing herbs which you and they can all avail of come harvesting time. You get the expertise of some more experience gardeners plus the needed ground space and in turn they get your knowledge as a herbalist. A lovely exchange can he had. Ross and I spent many years doing free talks at our local community gardening groups. In exchange we could harvest large quantities of plants like Sea Buckthorn or Dog Rose which we did not have growing on our own farm.



Elderflower vinegar

But let's take a step back from fresh tinctures. Some herbalists do not wish to take on tincturing. There are many other wonderful and valuable medicines to make to enhance your dispensary which you do not need to do any gardening for. I often encourage herbalists to first embark on making herbal vinegars. These are a superb addition to your dispensary. In practice we combine them freely with tincture formulas to great effect. They are potent remedies, yet most herbalists do not use litres and litres of them in the same way we do tinctures. Many of the most valuable vinegars you could make are wild plants which cuts out the horticultural skill or garden space. Our top vinegar extractions made from wild plants are: Galium, Urtica, Filipendula, Sambucus flower and berry, Rosa spp. hip, Sea Buckthorn berry and Blackberry. Some of these also make wonderful oxymels.

If connecting to a gardener is not an option honing your skills in wild crafting herbs is essential. There are many guides on proper foraging rules which must be adhered too especially when wild crafting for medicines. Correct identification is also crucial!

Focusing on wild plants is a great way to start drying some herbs. Your own Tilia blossoms, Crataegus flowers or berries dried well in small batches is like nothing you can ever purchase from suppliers. Over the years we built many herb dryers to suit our needs. Starting small with a stacked food dryer works very well. Drying yourself for teas in clinic may seem impossible because of quantities so begin drying some for your own personal teas. Doing this gives all herbalists a new appreciation for the time and effort that goes into a tiny amount of dried herb! From our experience working in large scale herbal medicine farming and production a note of caution must be said about buying in dried herb. Adulterants in the herbal industry is common! The herbs for clinic we simply cannot grow in this climate we buy in dried to process. Trusting your supplier, using your own organoleptic skills, and asking for certificates of analysis is key.

If you are a keen cream, lotion and balm maker there are many wild plants you can make herbal oils from. This is so satisfying. When it comes to treating musculosketal conditions having a range of oils to work from is valuable. External applications have an astounding effect on these conditions. Providing your patients with the tools to use topical herbal treatments brings us back to the importance of self-care.

Oils we like to make from wild plants include: Taraxacum flower, Bellis flower, Stellaria, Filipendula, Pinus tips, Betula leaves and Geranium robertanium. Cultivated plants include: Symphytum root and leaves, Calendula, Hypericum, Lavandula, Rosmarinus and Arnica. We use both the cold extraction method and the hot infused oil extraction method for these. For small quantities for your own clinical practice a





crock pot is very useful for hot oil extractions. As you become more and more confident with your processing skills you can create some very potent bespoke oils that become invaluable to your practice. An example is a mixed oil we make each year from fresh Rosemary flowering tops, Calendula flowers, Achillea leaves, Echinacea heads and Plantago leaf. We call this our Itchy Bitey Oil! We use it as an oil alone or add a little beeswax to make a quick healing balm. I regularly dispense this balm to patients for all manner of mysterious skin rashes and bites. In our house, with 3 young kids, this is an essential first aid balm. We grow over 200 species of plants at lvywood for medicines. When asked by herbalists where to begin I would recommend this top 20 to begin your medicine growing and making adventure with: Achillea millefolium, Melissa officinals, Leonurus cardiaca, Atremisia vulgaris, Eupatorium perfoliatum, Solidago virguarea, Verbena officinalis, Verbascum thapsus, Symphytum off., Matricaria recutita, Inula helenium, Mentha spp., Occimum, Stachys betonica, Scutellaria laterifolia, Calendula off. and Hypericum perforatum.

We feel it is an absolute privilege to be on this journey as herbalists and herb growers. It is filled with endless learning, personal growth, and joy. Even after many years of growing a particular plant it will continually surprise and astonish you. As you change and grow so does your connection with the plants. It appears that the plants are there, patiently waiting for you to be ready so they can reveal new facets of themselves. As herbalists you have already taken the plunge to commit yourself to the plants - the next step could be as simple as surrendering to their guidance!







Article by Marina Kesso

Herbalists Marina Kesso and Ross Hennessy run a specialist medicinal herb nursery at their home Ivywood, in Co. Clare, Ireland. Together they grow over 200 species of medicinal plants from around the world. The nursery operates as a source garden for others to have access to hard-tofind medicinal herbs.

Ross and Marina have been growing medicinal plants, harvesting, drying and making herbal medicine preparations for over fifteen years. They grew and produced herbal preparations commercially and spent the last ten years teaching the public, students, and fellow herbal practitioners to encourage and empower other plant lovers to grow, connect with and use healing plants as medicine.

Ivywood is set on 40 acres of magical woodland where Marina and Ross have spent the last 4 years developing the land. They are self-building a new teaching space and clinical practice from hemp and their own stone and timbers they hand felled from the woodland. This labour of love has brought many new elements to their relationship with the woods and the plants they grow there.

They are excited to be back sharing their knowledge through courses this summer including their 2 day Practitioner Practical Growing and Medicine Making Course for clinical practice. For details on events and the herb nursery please visit:

www.ivywood.ie





HAVE YOU SIGNED UP TO THE HERBAL ALLIANCE MEMBER'S PORTAL YET?

Join our private online network of Professional Herbalists in the UK & Ireland for FREE. Take part in conversations & events and discover information relating to the rich traditions, science and knowledge of Herbal Medicine.

BENEFITS:

- Network with other Professional Herbalists & make new contacts.
- Get access to our FIND A HERBALIST feature, a map that will allow members of the public to find you!
- Join exclusive practitioner-only and public events.
- Join a Community Action Team to bring positive change and collaboration to the community of Herbalists in the UK & Ireland.
- Take part in raising awareness of Herbal Medicine, to show what we can do for the benefit of people's health.

REQUIREMENTS:

 You must be a Qualified & Insured Practicing Herbalist, a Student in a Practitioner course, a Retired Herbalist or a member of one of the 15 Professional Associations currently collaborating together as part of the Herbal Alliance.

<u>Please note:</u> The Herbal Alliance does not replace a Professional Association. While the Herbal Alliance takes care to approve only qualified and insured herbalists into the network, it is a community platform and does not specifically oversee professional standards. Please refer to a Professional Association if you wish to join one. Professional Associations that participate in the Herbal Alliance are found here: https://www.herbalalliance.uk/about-us-professional-associations/



EXCLUSIVE MONOGRAPH

Photographs & graphics by the author unless otherwise referenced

p50

p51

p53

p53

p57

NATIVE PLANT MEDICINE

PRIMROSE Primula vulgaris L.

By Sarah Hawkins mBANT, mIRH, rCNHC



1. NOMENCLATURE:	p47	6. PHYTOCHEMISTRY:
2. DESCRIPTION:	p47	7. MEDICINAL USES:
3. CULTIVATION:	p49	8. CONTRAINDICATIONS :
4. MYTHOLOGY & HISTORY:	p49	9. RESEARCH:
5. ENERGETICS & EXPERIENCE:	p49	10. REFERENCES



1. NOMENCLATURE

Latin name: Primula vulgaris. Synonyms: Primula acaulis, Primula grandiflora. Common name: Primrose, common primrose, English primrose. Plant Family: Primulaceae. Parts used: Root, flowers and leaves.

2. BOTANICAL DESCRIPTION

HABITAT:

Often one of the first flowers of spring, Primrose is a common sight in British and Irish woodlands, hedgerows and railway embankments. It can also be found in orchards, under bushes and by streams (Botanical Society of Britain and Ireland, 2020; MacCoitir, 2016; Grieve, 1931). The map to the right shows *Primula vulgaris'* distribution across the British Isles and Ireland. The red is for recorded sightings from 2010-2019 and the green represents recorded sightings from 2020 onwards.

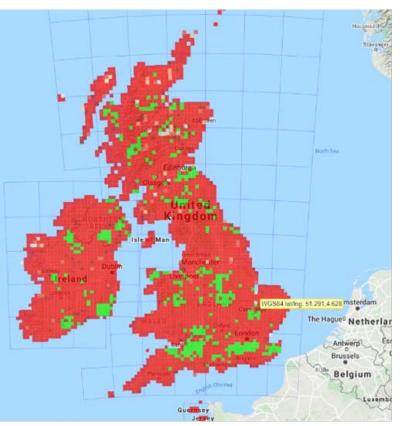


Image credit: https://bsbi.org/maps?taxonid=2cd4p9h.5vd

DESCRIPTION:

Primula vulgaris is a semi-evergreen perennial woodland plant than grows no more than 10cm in height. The root is formed by the consecutive rosettes of fallen leaves at the plant's base, with smaller branched rootlets forming at the sides in a cylindrical pattern. The oblong leaves are dark green, hairy, and bluntly toothed. The leaves grow to no more than 5 inches in length and 1.5 inches in width, being widest in the middle and tapering at either end. The veins of the leaves are prominent and sunken, giving a crinkled appearance to the leaf. The flowers appear December to May and are typically pale yellow, with one flower per stalk. However, white and pale mauve/ purple also exist in the wild, but these colours are much less common. The flowers each consist of 5 petals with a clefted outer tip that sit on top of stalks that are upright, rigid and hairy in texture. The inner tip of each petal is a bright egg-yolk yellow colour, forming a distinct yellow star like shape in the middle of the flower heads. The soft, green seeds are held in a green ball shaped calyx. Once ripe, the calyx becomes white in colour and the seeds are hardened and darken to brown in colour.

Care should be taken not to confuse Primula vulgaris with oxlip (Primula elatior) or cowslip (Primula veris). The former is a thought to be a hybrid between P. vulgaris and P. veris, and the flowers form in stalked umbels that all hang to the one side. Whilst the cowslip also has flowers that form in stalked umbels, but they are tubular in shape, smaller and much darker in yellow compared to the softer lemon hue displayed by P. vulgaris and P. elatior. The cowslip is a protected species in Northern Ireland and must not be picked (Woodland Trust, 2020). Confusion must also be avoided over the commonly grown garden varieties of P. vulgaris, which have larger flowers heads and come in a vast array of colours. Presently, it is unknown if these garden plants hold the same medicinal properties as their wild counterparts.



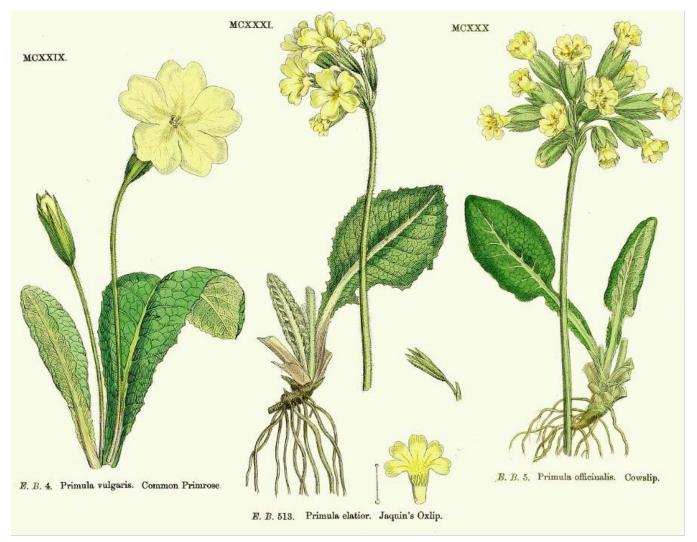


Image credit: https://www.pinterest.com/pin/146437425368607147/



Primula veris (Cowslip).



Primula vulgaris (Garden variety).



ECOSYSTEM:

The flowers provide nectar sought after by pollinating insects, in particular the brimstone (shown below) and small tortoiseshell butterflies (Woodland Trust, 2020). Other pollinators include bees and diurnal moths (Coloumbo & et al., 2017). The leaves are also consumed by the common silkworm (Grieve, 1931).



Image credit: https://frogenddweller.wordpress. com/2015/04/10/on-the-brimstone-flight-path/

3. CULTIVATION

METHODS OF PROPAGATION:

Primula vulgaris propagates both by seed and root basal cuttings (RHS, 2020).

MAINTENANCE:

No pruning required. May be subject to att ck from aphids, vine weevil, slugs, leaf and bud eelworms, leaf mining flies and glasshouse red spider mite. The plant can also be susceptible to leaf spot and grey moulds (RHS, 2020).

HARVESTING/WILDCRAFTING:

The leaves and flowers may be harvested when in bloom during the Spring. However, roots are best dug in autumn from plants that are at least 2 years old (Grieve, 1931).

4. MYTHOLOGY & FOLKLORE

FOLKLORE:

According to MacCoitir (2016, pp 49-52) it was commonplace for children in England to gather the flowers before dusk on May Day. They then made the flowers into posies which were hung around doors, windows and even cattle to ward off fairies and evil influences Some of the bunches were also presented to both parents and the church as decorative gifts. The flowers were seen as a symbol of health, fortune and courtship. To give only a small bunch of primroses was touted to be unlucky. While if the flowers failed to bloom in a village it was feared that the people may too die off along with the flowers.

Meanwhile, in Ireland, McCoitir also notes that the primroses enhanced feminine beauty and that they were also mentioned in various Celtic myths, such as the 'Cattle raid of Cooley' where warrior Nera brings back primroses as proof of his visit to the fairyland.

Hildegard (Hozeski, 2001, p. 172) wrote that the herb takes its power from the sun and that the herb should be placed directly on the chest to warm up those with melancholy, and directly to shaved heads of those 'oppressed by bad humours in the head.' Hildegard also commends the flowers taken as an infusion to treat palsy.

5. ENERGETICS

WESTERN ENERGETICS:

Not much is recorded in the existing literature about P. vulgaris, or that of its energetics. However, Gerard refers to Primroses (to include other Priumla spp.) as dry and slightly warming. Moreover, Blackwell (1737) writes;

'The Flowers are commended as good against Disorders arising from phlegmatic Humours. The Juice of the Root is used as an Errhine to purge the Head of tough slimy Phlegm'.

Based on Blackwell's (1737) writing, it could also be argued that the plant is warm and dry as it assists with the drying up and dispersing of cold, damp phlegmatic conditions. It is disappointing that Parkinson (1640), Culpeper (1814), Grieve (1931), Hatfield (2004) and Bartram (2015) fail to mention any notes with regards to the energetics of the herb.

ORGANOLEPTICS:

Flowers, fresh

Smell: Mild, fresh, floral. **Taste**: Buttery, creamy, floral, delicate, silky.



Effect: Slightly warming, uplifting, gentle and calming.

Leaves, fresh

Smell: Mild, green, grass, earth, moss.

Taste: Mildly bitter, refreshing, spicy, anise, light, salt, earthy.

Effect: Increased salivary secretions, feeling of a lingering, dry warmth at back of the throat, its goes up into the head, then settles in chest and remains in the throat for over an hour. Calming.

PERSONAL EXPERIENCE:

The common primrose is a herb that vividly stands out from my childhood, for it grew wild and abundantly in the fields where I often walked with the family dog. It was always a firm favourite of mine as it was a slightly better indicator of the return of the warmer weather than the snowdrop. As an adult, I have noticed that my local wild primroses growing in the North of Ireland appear to have a preference for growing near or on river banks. There appears to be a preference for moist soil, perhaps linking back to its drying energetics.



As a herbalist I am drawn to the plant because it is so common, and yet greatly underused and undervalued. Rather, its cousin the cowslip is generally favoured, but Primula veris is growing increasingly rare. As a medicine I have limited experience of using the herb, for there is no local supplier of the dried/tinctured herb. However, I did carefully collect several flowers and leaves where the plant grew in abundance from the same spot in both early March and end of April 2021. Unfortunately, I was unable to sample the roots as I did not want to uproot any of the plants. I found that the leaves and flowers sampled in March to be considerably milder in both taste and effect than those picked later in the season. I postulate that medicinally the plants may have better phytochemistry later in the season. Or, perhaps it was the influence of harvesting around a full moon that made the April samples more potent than March's.

Energetically, I find primrose to be warm in the first degree and drying in the second degree. However, I find it difficult to form a complete opinion due to my limited taste testing with the plant. I feel I would greatly benefit from being able to purchase sustainably harvested dried material to sample as an infusion or a fresh tincture to get more familiar with this particular herb.

6. PHYTOCHEMISTRY

ALL CONSTITUENTS: MICRONUTRIENTS:

Vitamins:

Leaves

Asorbic acid (Remmington and Wood, 1918). Saponins (Grieve, 1931).

Iridoid glycosides primverin and primulaverin, and an enzyme, primverase (Remington & Wood, 1918).

Phenols:

Flowers: Kaempferol 3-O-glucopyranosyl-(1 gentiobioside (Coloumbo & et al., 2017) acid, Protocatechuic acid, p-OH Gallic

benzoic acid, Catechin, Vanillic acid, Caffeic acid, p-coumaric acid, Rutin, Syringic acid, Epicatechin, Ferulic acid, Trans-cinnamic acid and Luteolin (Ozkan & et al., 2016).

2).

 \rightarrow

Leaves:

Vanilic acid, epicatechin, p-coumaric acid, ferulic acid, daidzein and luteolin (Cakir & et al., 2017)

Roots:

Primulite (Remington & Wood, 1918).



7. MEDICINAL USES

HERBAL ACTIONS:

Anti-arthritic (Parkinson, 1640, p.247), antihelminthic (Grieve, 1931), anti-inflammatory (Bartram, 2015 p.354) antispasmodic (Bartram, 2015), astringent (Bartram, 2015), emetic (Bartram, 2015; Grieve, 1931; Gerard, 1636), expectorant (Hoffman, 2003, p. 76), vermifuge (Grieve, 1931).

INTERNAL USES:

Much of the existing literature in Western Herbal Medicine discusses the virtues of *P. veris*, often neglecting, or at best, only mentioning *P. vulgaris* in passing. However, it would appear that the two herbs offer very similar medicinal uses, as the Primroses have a noteworthy history of medicinal application for spasms, gout, wound healing, and rheumatic pain (Grieve, 1931, Parkinson, 1640, p. 247 and Gerard, 1636 p.779).



P. vulgaris in mauve (Belfast, April 2021).

According to MacCoitir (2016) and Hatfield (2004, p.215), the flowers of P. vulgaris were boiled in milk and drank daily as a cure for jaundice in Ireland. Meanwhile in County Cork, primrose tea was alleged to be a good remedy for insomnia. Similarly, Grieve (1931) records that the plant has sedative qualities, with a history of use in America for insomnia and general agitation. Grieve writes that for these purposes,

a fresh tincture was made using the flowers in bloom.

In his chapter devoted to Cowslips, Gerard (1636, pp 779-781) opens with the line 'herbs which at this day are called primroses, cowslips and oxlips.' Gerard then goes on to identify a total of eight Primula spp. Therefore, demonstrating that the chapter is not just specific to P. veris. Whilst he fails to mention Primula vulgaris by name, his writings do include a sketch of what appears to be the herb under the name P. veris minor or 'Field Primrose'. He also refers to Cowslip as P. veris major. Thus it appears reasonable to suggest that Gerard used the term P. veris minor with regards what is now known as P. vulgaris. Interestingly, when discussing the virtues of these plants he appears to group them together when recommending them against gout and stiffness in the sinews. Parkinson (1640, p.247) also groups Primula spp together when discussing their virtues. Whilst Gerard fails to mention which part of the plants are used for gout, he does specify a decoction of the roots for kidney and bladder stones, and the juice of the leaves for joint pain. Gerard also highlights specifically that P. vulgaris, or 'the field primrose', should have its roots harvested in autumn before being dried and powdered. This powder can then be placed in ale or wine as a simple and used as a strong emetic, which despite its power, is considered very safe.

Gerard (1636, p. 783)also wrote that the flowers and leaves of primrose picked in May, boiled in a little water along with betony water, was a drink given to cure 'phrensie' with added sugar, salt, pepper and butter. Meanwhile, the juice strained from fresh roots was said to alleviate migraine pains. Grieve (1931) appears to have copied this statement from Gerard as she too implies that an infusion of the root was still used to cure 'nervous headaches'. References to this application can also be found in Parkinson (1640, p. 247) who stated that Primula spp. were second only to betony (*Stachys officanlis*) for 'paines in the head.'

Furthermore, Gerard (1636, p. 783) commended primrose flowers in vinegar for throat issues and the leaves and flowers in wine for all ailments of the chest and lungs.

Pliny according to Grieve (1931), records that primrose was considered a chief remedy in muscular rheumatism, paralysis and gout.



Parkinson (1640, p. 247) also writes that Primula spp. are highly regarded in the treatment of painful joints, arthritis and paralysis. It is unfortunate that there are no clinical trials to date to support or dispute this anecdotal statement.

Meanwhile, writing in the early 1900s in France, Leclerc (1925, pp. 1155-1166) appears to group Primula spp. together. In an article titled Primula officinalis, a former synonym of P. veris, Leclerc recommends the herb as an infusion to help paralysis, as an expectorant and a haemolytic. Leclerc further mentions the species as a whole is indicated in gout, anxiety, limb tremors and as a cardiotonic. Speaking of the flowering plants, he writes that as a hydrosol they comfort and warm the heart and are also good to shrink tumours, banish headaches and blemishes of the face, as well as to take the pain out of scorpion stings. Leclerc also includes in his writing a remedy known as 'aqua generalis' formulated by Ann Marie D'Auverdne. The remedy consisted of 126 plants, one of which was the flowers of a Primula spp. However, it is unclear whether it was P. vulgaris or P. veris. The remedy was specific for paralysis, palpitations, bursitis, measles and chickenpox, with the flowers macerated for 6 weeks in an oil left in sunlight.

Speaking with regards to cowslip, Leclerc (1921) additionally writes that it is a worthy expectorant. In particular, it is indicated in all cases where it is necessary to overcome infections of the bronchioles and acute bronchitis, pneumonia, whooping cough. In Turkey, however, they would use P. vulgaris much in the same manner, both as an expectorant and also for throat infections. An infusion of the flowers and leaves taken in doses of 1-2 cups per day is what was typically recommended (Sezik, Zor, & Yesilada, 1992). Grieve (1931) also notes that 'the whole plant has somewhat expectorant qualities'.

EXTERNAL USES:

In Ireland a salve was made of primrose flowers and pig's lard as a cure for burns (MacCoitir, 2016). Indeed, Culpeper (1814, p. 206) writes that the leaves were used to make 'as fine a salve to heal wounds as any that I know'. Whilst Gerard (1636, p. 783) also commended primrose flowers, presumably as a poultice, for drawing out splinters and thorns.

In Suffolk, an ointment made from the flowers was a local remedy for ringworm (Hatfield, 2004,

p.293). Hatfield (2004, p. 307) further cites that dried leaves were macerated in oil for shingles. It is unclear from Hatfield's writings whether this oil was believed to help with the pain, itch and/ or viral element of shingles.



Similarly, there are records from Norfolk which state that the leaves were crushed in oil and applied to burns (Hatfield, 2004, p.54). P. vulgaris was also paired with Potentilla erecta (tormentil) to heal cuts in Cumbria (Hatfield, 2004, p.105). Moreover, in Suffolk the roots of P. vulgaris were dried and finely powdered and used as a snuff for migraines. In Wales, Primrose roots were added to dried betony leaves and used in the same way (Hatfield, 2004, p.237).

Interestingly, LeClerc wrote of P.veris that because of the rich saponins found in the roots, it was especially good for dispersing bruises. He advises using compressions containing 1:1 fluid extract of the root and adding 5ml per 100ml of boiled, cooled water. Alternatively a root decoction was said to be superior, but more timely. Presently, it is unclear whether P. vulgaris offers a comparable level of saponins to P.veris in order to offer the same effects based on current literature. The work of Colombo et al., (2017) cites that saponins were first found in P. vulgaris but fails to go on to provide the percentages, only citing those found in P. veris and P. elatior. Grieve (1931) also mentions saponins in P.vulgaris but it is not clear from her writing whether they are attributed with being a medicinally useful component of the herb.



SYNERGISTIC USES:

CATARRH AND DRY COUGH:

Althaea officinalis, Glycyrrhiza glabra, Pimpinella anisum and P. vulgaris (radix) as an infusion (Barnes, Anderson, & Phillipson, 2007, p. 419). No quantities or ratios are provided by Barnes, Anderson and Phillipson, so the author of this monograph proposes equal parts Althaea officinalis, Glycyrrhiza glabra and P. vulgaris with ½ part Pimpinella anisum and a dosage of 1 tbsp per cup, thrice daily.

HEADACHE:

Combine equal parts dried *Stachys officinalis* (folia) and dried *P. vulgaris* (radix) either as a tincture or an infusion. For the latter ½ tsp per cup, thrice daily (adapted from Hatfield, 2004, p.237).

DOSAGE:

Tincture, fresh plant: 10oz to 1 pint 45% alcohol; macerate 8 days, filter. Dose 1-10 drops twice daily (Bartram, 2015, p.354).

Ointment: 1 part herb to 10 parts base cream (Bartram, 2015, p.354).

Triune: 1/9th part. **Triune classification:** Skin, respiratory, nervous system.

Aromatherapy uses: There are no recorded uses cited in Worwood (1990) nor Tisserand and Young (2014).

CULINARY USES:

Grieve (1931) writes that the flowers were a primary ingredient in a medieval thick soup known as 'Primrose Pottage', and were also used in a sweet rice dish that contained almonds, honey, saffron, and ground Primrose flowers.

A fine primrose wine can be made by macerating 5 handfuls of the flowers in wine (red or white) for 2 weeks (Simply Beyond Herbs, 2021). Hoffman (1992) writes that a similar great tasting wine can be made using Primula veris, but attributes the picking of cowslip for wine as a key factor in its decline.

The leaves can also be eaten as a salad leaf, whilst the flowers can also be eaten and used to adorn food with.

COSMETIC USES:

Primula vulgaris, as well as P. veris and P. elatior

are often claimed in older texts to have been favoured by women to improve complexion and remove blemishes on the face (Leclerc, 1925; Culpeper, 1814; Parkinson, Paradisi in Sole Paradisus Terrestris).

Dyes:

None identified.

Other uses:

In Ireland, primrose roots were crushed and strained in milk and applied to the nostrils of horses who had a cough (MacCoitir, 2016).

8. CONTRAINDICATIONS

CONTRAINDICATIONS/HERB-DRUG INTERACTIONS:

Of the few sources who care to mention the use of P. vulgaris, most neglect to mention any possible contraindications (Bartram, 2015, p.354; Grieve, 1931). The primula spp. in general, including P. vulgaris are known to occasionally create skin irritation when handled. This is due to a secretion from the hairy parts of the stems (Remington & Wood, 1918). Therefore, the plant should be used with caution in those with skin sensitivities and best avoided completely in those with known reactions to other Primulaceae species.

The plant should also be avoided in pregnancy and breastfeeding as no information is currently available to vouch for its safety, nor does there appear to be any traditional use for the herb during either of these times from the existing literature reviewed in the creation of this monograph.

Due to the salicylate content, the herb may also be best avoided in those with aspirin sensitivities or on any anticoagulation drugs, such as warfarin (Brown, 1995, p. 238).

9. RESEARCH

CLINICAL TRIALS:

There are no systematic reviews or human based clinical trials available for *Primula vulgaris* as of the 12th June 2021. The author searched the following sources; Research Gate, Pubmed,



Google Scholar and Science Direct; using the search terms: "Primula vulgaris", "P. vulgaris", "Primula" and "Primrose".

OTHER RESEARCH:

1) Demir, S, Turan, I. and Aliyazicioglu, Y. (2019).

Antioxidant Properties of Primula vulgaris Flower Extract and Its Cytotoxic Effect on Human Cancer Cell Lines.

Summary: This study builds on previous research conducted by the authors (discussed below), but this time looking at wider applications for the herb. The flowers of P. vulgaris used in this in vitro study were carefully air dried before being powdered. Then lg of the powdered flower material was added to 20ml of dimethyl sulfoxide (DMSO) to form the extract used. The cancer cell lines were human colon (WiDr), lung (A549), liver (HepG2), breast (MCF-7), and prostate (PC-3). Additionally human fibroblast cell line was also used by way of control. The cells outlined above were then mixed with the P. vulgaris extract to ascertain if there was any anti-cancer activity. The healthy human fibroblast cells were used to assess if there was any selectivity demonstrated if cytotoxic action was present. The results indicated that P. vulgaris flower extract has cyotoxic activity and that it demonstrates some level of protective selectivity. The flower extract appeared most potent against the lung and liver cancer cell lines.

Comments: This is a preliminary study into the potential cytotoxic activity of P. vulgaris. This study builds on previous research conducted by the same authors in 2018, which looked at the anti-cancer activity of the herb in human cervix cancer cells (discussed in greater detail below). Ultimately, this study has demonstrated that P. vulgaris appears to have selective cytotoxic activity in cancer cells in vitro, but it remains unclear if this can be replicated in vivo. Certainly, there appears to be limited anecdotal recordings of applying the herb in patients with cancer. However, some other research into other Primula species has revealed cytotoxic affects, including one study on P. auriculata (Behzad, Pirani, & Mosaddegh, 2014), but this again is in vitro studies, and not in vivo.

It would have been beneficial to have compared

fresh and dried extracts to ascertain if any notable difference exists between the two, with one or other giving a favourable cytotoxic reaction.

However, it is good to note that the flowers were used in their whole form, and not as isolated extracts of the constituents, allowing for a syngeristic affect to take place. This replicates the traditional methods employed by herbal medicine practitioners.

2) Demir, S., Turan, I., Aliyazicioglu, R., Yaman, S. O. and Aliyazicioglu, Y. (2018).

Primula vulgaris extract induces cell cycle arrest and apoptosis in human cervix cancer cells.

Summary: Whilst there have been several studies that have examined the cytotoxic activity of various Primula species, P. vulgaris has been somewhat overlooked. Therefore, this paper looking at the potential cytotoxic activities of P. vulgaris against human cervical cancer (HeLa) cell lines is very much welcomed. The authors of this research used dried flowers collected during Spring 2015 from an area in Trabon, Turkey. The researchers found that in vitro the herb causes an interruption to the cell cycle, as well as inducing apoptosis when present at the right concentrations. Importantly, the researchers also highlighted that Primula vulgaris' cytotoxic affect appeared to demonstrate selectivity, thus protecting healthy, non-cancerous cells. The conclusions drawn from this paper were that P vulgaris exerts a significant cytotoxic affect, but that further research is now required in order to validate the results and ascertain which phenols which are responsible.

Comments: As highlighted by the authors of this research, cervical cancer is the second most common cancer that inflicts women on a worldwide scale. Therefore, research into potential novel treatments are urgently required, especially those that come with fewer side effects than many of the conventional treatments currently available. This paper was relatively well conducted, allowing for future replication, as the researchers stated information about where the material came from, how it was processed and the amounts used. It is also pleasing to see that human cells were used and not animal cells, allowing greater anticipation that the results will be replicated in



any future in vivo human clinical trials. However, the paper is ultimately limited by the very fact that it is neither in vivo nor a clinical trial, thus further research remains outstanding.

It is also interesting to note that the plant material was harvested in 2015, yet the paper is published in 2018. It would have been beneficial for the authors to have stated how old the dried material was at the time of the experiment. If the material was already 2 years old at the time of use, then it would be beneficial for the experiment to be repeated using fresher material to allow for any differences to be observed. This would allow for an understanding of whether fresher material yields more potent anti-cancer results, or whether the plant's photochemistry remains sufficiently intact after sufficient time has passed. If the latter is true, greater detail on precisely how the material was stored would then be required. Moreover, it would also be interesting to the herbalist to ascertain whether a preparation using the fresh flowers generated more or less potent results.

3) Turan, I., Demir, S., Aliyazicioglu, R. and Aliyazicioglu, Y. (2017).

Evaluation of Antioxidant and Cytotoxic Properties of Primula vulgaris Leaf Extract.

Summary: The authors of this study claim to be the first to report on both the phytochemical content of the leaf of Primula vulgaris, as well as in testing an extract of the leaves for anti-cancer properties. The plant material was obtained from Trabzon, Turkey, during the spring of 2015. The human cancer cell lines used were human lung (A549), liver (HepG2), breast (MCF-7), prostate (PC-3), and colon (WiDr). Additionally, healthy fibroblast cells were used to ascertain whether the herb exerted any selectivity in its cytotoxic action. The results demonstrated significant anti cancer activity on all human cancer cell lines with no damage recorded on the normal fibroblast cells. Thus the plant appears to be selectively cytotoxic by only targeting unhealthy cells. Consequently, this led the researchers to call for further studies to be carried out on the leaves of P. vulgaris.

Comments: This paper further supports the findings of the previous two papers, only this time looking at the leaves. This indicates that

the aerial parts of P. vulgaris at least, may have cytotoxic potential. However, as per the previous papers, this study is limited by the fact that it is in vitro. There is now a need for more studies looking at the whole plant, including the roots, to see if P. vulgaris holds any promise as an anticancer treatment in humans.

4) Tugce Ozkan, M.T., Aliyazicioglu, R., Demir, S., Misir, S., Turan, I., Yildirmis S, and Aliyazicioglu, Y. (2016).

Phenolic Characterisation and Antioxidant Activity of Primula vulgaris and Its Antigenotoxic Effect on Fibroblast Cells.

Summary: The authors of this paper collected P. vulgaris flowers during the summer from Trabzon, Turkey. The material was air-dried before being powdered and processed using a water extraction method. The aim of this study was twofold. Firstly, the authors wanted to ascertain the phenol composition of the extract. And secondly, the authors wanted to assess whether this water extraction offered significant antioxidant protection to preserve human foreskin fibroblast cells from DNA damage. The authors used H2O2 to generate oxidative DNA damage in the fibroblast cells and used differing concentrations of H2O2 to better establish the potency of any antioxidant activity offered by Primula vulgaris. The results demonstrated that the plant material was a source of numerous beneficial phenols, namely Gallic acid, Protocatechuic acid, p-OH benzoic acid, Catechin, Vanillic acid, Caffeic acid, p-coumaric acid, Rutin, Syringic acid, Epicatechin, Ferulic acid, Trans-cinnamic acid and Luteolin. The results also demonstrated that P vulgaris exerts significant antioxidant protection in vitro on human fibroblasts, sufficient enough to warrant the authors to commend the herb be used in the food, cosmetic, and drug industries as an antioxidant and antigenotoxin.

Comments: This paper makes interesting reading, revealing some lessen known potential of the much neglected P. vulgaris. The authors have exposed a wide ranging set of phenols contained within the plant and hinted that they work well as a water extraction. This suggests to the herbalist that an infusion of the herb in hot water and drank as a tea may bestow beneficial antioxidant activities to patients. Certainly traditional use, as highlighted above, points



to this already. It is also good to see that the authors have been relatively specific as to when and where the plant materials were harvested, the parts used and how they were processed for the purposes of this study. This allows for some level of replication in future studies. Although, it could be argued that it would have been of further benefit to know the exact date in which the plants were picked as notable differences may be obtained from plant material harvested in June as opposed to July/August.

As always, there are some notable restrictions in the interpretation of this paper. Chiefly, this was an in vitro study, whereas in vivo studies are preferable as they provide a more accurate representation of how the herb acts upon living human cells. The authors also fail to specify whether the plant material was wild harvested or cultivated which may have an impact on the phytochemistry and observations in further studies.

Nevertheless, despite the drawbacks, this study does set the stage for further exploration to take place and highlights some potential novel uses for P vulgaris.

5) Majid, A., Hassan, S., Hussain, W., Hassan, A., Khan, A., Khan, T.M., Ahmed, T., Rehman., M. and Pakhtunkhwa, K. (2014).

In vitro approaches of Primula vulgaris leaves and roots extraction against human pathogenic bacterial strains.

Summary: The researchers of this paper used the dried roots and leaves from Primula vulgaris to ascertain whether they exhibited any antibacterial activity against E. coli, P. aeruginosa and S. aureus. The fresh plant material was purchased from Awan Nursery in Haripur, Pakistan. The researchers then separated and air dried the plant material before powdering. The leaf and root powders were stored separately. A total of 4 extracts were then created, a separate ethanol and cold water extract of the leaves, and the same of the roots. These 4 extracts were then used individually to assess antibacterial The researchers found that both activity. the root and leaf extracts were significantly antibacterial to E. coli and P. aeruginosa. There was no considerable action against S. aureus of any extract. Interestingly, the ethanol extraction of the leaves and the cold water extraction of the root performed best against E. coli. Whereas all 4 extracts were similarly effective against P. aeruginosa, with the water extraction of the roots appearing marginally superior. Although slight in action, the cold water extraction of both roots and leaves appeared to offer slightly more activity against S. aureus in comparison to the ethanol extracts. The results of this paper led the researchers to conclude that P. vulgaris may offer novel and effective ways to combat human bacterial infections with minimal side effects and costs.

Comments: Once again it is encouraging to see novel research on Primula vulgaris, particularly on the leaves and roots, which are the often neglected parts of this herb. This study documented its processes sufficiently, allowing for some level of replication in future studies. It is pleasing to see that the plants were used in their whole form rather than the extraction of a specific phytochemical from within the material. Ultimately, this allows for synergistic actions to be observed, thus replicating the traditional use and consumption of the plant in its whole form. It is also interesting to note that a cold water extraction method was used, as opposed a hot water extraction. This differs from the hot water infusions so often employed in traditional herbal medicine. Perhaps a future study comparing cold and hot water extractions would be useful to ascertain if the same benefits can be obtained if giving a patient primrose tea.

When assessing some of the drawbacks of this paper, perhaps one of the more obvious ones is that it would have been beneficial for the authors to have included an ethanol and a water extract of the flowers. This would have permitted a greater understanding of the potential antibacterial activity of the whole plant. Moreover, it is unclear how long the powdered material was stored before being used. This would have been useful to know to help develop an understanding of the timeframe in which the material exerts sufficient antibacterial activity. Aside from these, the other evident drawback is that it is not yet known if the same results would have been obtained in vivo. This greatly inhibits the herbalist's inclination to apply P. vulgaris in cases of bacterial infection when there already exists many well-known antibacterial herbs. Therefore, it is clear that more research is required to determine whether P. vulgaris is a viable alternative to these other herbs.



6) Deliorman Orhan, D., OzCelik, B., Hosbas, S. and Vural, M. (2012).

Assessment of antioxidant, antibacterial, antimycobacterial, and antifungal activities of some plants used as folk remedies in Turkey against dermatophytes and yeast-like fungi.

Summary: This paper looked at 21 different herbs that had a history of traditional use in

Turkey for respiratory illnesses, one of which included the leaves of P. vulgaris. The plants were collected from regions of Turkey between April and August 2010 before being extracted by infused, filtered and freeze dried.

Comments: This paper builds on a previous study which demonstrated that P. vulgaris shows great promise as an antifungal treatment caused by T. rubrum and E. floccosum. (Ali-Shtayeh & Abu Ghdeib, 1999).



<u>Monograph by</u> <u>Sarah Hawkins</u> <u>Registered Nutritional Therapist & Herbalist</u> DipCNM, Dip. HERB MED, mBANT, mIRH, rCNHC

Sarah is a Nutritional Therapist and Herbalist from Belfast, Northern Ireland who works primarily with women aged 25-45 struggling with hormonal imbalances and gut health issues to regain their energy and vitality to help them look and feel their best every day of the month.

www.sarahhawkinsnutrition.com



@sarah.hawkins.nutrition

10. References

- Ali-Shtayeh , M., & Abu Ghdeib, S. (1999). Antifungal activity of plant. *Mycoses*, 42(2), 465-472. Retrieved February 3, 2021, from http://dx.doi.org/10.1046/j.1439-0507.1999.00499.x
- Barnes, J., Anderson, L., & Phillipson, J. (2007). Herbal Medicines Third Edition. London : Pharmaceutical Press.
- Bartram, T. (2015). Bartram's Encyclopedia of Herbal Medicine. London: Robinson.
- Behzad, S., Pirani, A., & Mosaddegh, M. (2014). Cytotoxic Activity of Some Medicinal Plants from Hamedan District of Iran. *Iranian Journal of Pharmaceuticall Research*, 199-205. Retrieved June 01, 2021, from https://www.ncbi.nlm.nih.gov/pmc/ articles/PMC3977071/
- Blackwell, E. (1737). A curious herbal.
- Brown, D. (1995). *Encyclopaedia of Herbs* and their Uses. London: Dorling Kindersley.
- Cakir, H., & et al. (2017). Phenolic Compo-

nents and antioxidant activity of Primula vulgaris (Primrose). International Congress on Medicinal and Aromantic Plants, (pp. 713-719). Konya. Retrieved February 01, 2021, from https://www.researchgate.net/ publication/322071571_PHENOLIC_COM-PONENTS_AND_ANTIOXIDANT_ACTIVI-TY_OF_PRIMULA_VULGARIS_PRIMROSE

- Coloumbo, P., & et al. (2017). Phytochemistry of European Primula species. *Phytochemistry*, 147, 132-144. Retrieved January 25, 2021, from https://www. sciencedirect.com/science/article/pii/ S0031942217302558
- Culpeper, N. (1814). Culpeper's Complete Herbal. London, England: Richard Evans.
- Deliorman Orhan, D., & et al. (2012). Assessment of antioxidant, antibacterial, antimycobacterial,. *Turkish Journal of Biology*, 36(3), 672-686. Retrieved February 3, 2021, from https://journals.tubitak.gov.tr/biology/issues/biy-12-36-6/biy-36-6-8-1203-33. pdf



- Demir, S., & et al. (2018). Primula vulgaris extract induces cell cycle arrest and apoptosis in human cervix cancer cells. *Journal of Pharmaceutical Analysis, 8*(5), 307-311. Retrieved November 01, 2020, from https://www.ncbi.nlm.nih.gov/ pubmed/30345144
- Demir, S., Turan, I., & Aliyazicioglu, Y. (2019). Antioxidant properties of Primula vulgaris flower extract and its cytotoxic effect on human cancer cell lines. 22(1), 19-25. Retrieved January 16, 2021, from https:// www.semanticscholar.org/paper/Antioxidant-Properties-of-Primula-vulgaris-Flower-Demir-Turan/aef75ba61c72c0437bf520a162837223f65771e6
- Dioscorides. (2000). The Herbal of Dioscorides the Greek. Johannesburg, SA: IBIDIS.
- Gerard, J. (1636). The herbal or general history of plants. London, England: Norton and Whitakers.
- Grieve, M. (1931). A Modern Herbal.
- Hoffman, D. (1992). Welsh Herbal Medicine. Pembrokeshire: Abercastle Publications.
- Hoffman, D. (2003). *Medical Herbalism*. Rochester, Vermont: Healing Arts Press.
- Hozeski, B. (2001). *Hildegard's healing plants*. Boston: Beacon Press.
- Leclerc, H. (1925). Primula officinalis. La Presse Medicale(69).
- MacCoitir, N. (2016). Ireland's wild plants; myths, legends and folklore. Cork, Ireland: The Collin's Press.
- Majid, A., & et al. (2014). In vitro approaches of Primula vulgaris leaves and roots extraction against human pathogenic bacterial strains. *World Applied Sciences Journal, 30*(3), 380-391. Retrieved January 20, 2021, from https://www.researchgate.net/publication/260266252_In_vitro_Approaches_of_Primula_vulgaris_Leaves_and_Roots_Extraction_against_Human_Pathogenic_Bacterial_Strains
- Ozkan, M., & et al. (2016). Phenolic Characterisation and Antioxidant Activity of Primula vulgaris. Jundishapur Journal of Natural Pharmaceutical Products, 12(1), 312-17. Retrieved January 27, 2021, from https://services.kowsarpub.com/cdn/serve/313eb/c09b4dca568d1231abddeb0a7aeeeb0ef2b-9c00d/jjnpp-12-01-40073.pdf
- Parkinson, J. (1640). *Theatrum Botamicum*. London: Thor Coter.
- Parkinson, J. (n.d.). Paradisi in Sole Paradisus Terrestris.

- Remington, & Wood. (1918). The US Dispensary.
- Sezik, E., Zor, M., & Yesilada, E. (1992). Traditional Medicine in Turkey II. Folk Medicine in Kastamonu. *Pharmaceutical Biology*, 30(3), 233-239. Retrieved February 26, 2021, from https://www.researchgate.net/publication/250187964_Traditional_Medicine_in_Turkey_II_Folk_Medicine_in_Kastamonu
- Simply Beyond Herbs. (2021, January 26). *Primrose Infused Wine Recipe*. Retrieved from https://simplybeyondherbs.com/ primrose-wine-recipe/
- Tisserand, R., & Young, R. (2014). Essential Oil Safety: A Guide for Health Care Professionals. London, United Kingdom: Elsevier Ltd.
- Turan, I., Demir, S., Aliyazicioglu, R., & Aliyazicioglu, Y. (2017). Evaluation of Antioxidant and Cytotoxic Properties of Primula vulgaris Leaf Extract. *Journal of Natural Science*, 20(4), 361-67. Retrieved January 29, 2021, from https://avesis.ktu. edu.tr/yayin/4efdc68f-ab62-4822-a357f318092ec35b/evaluation-of-antioxidant-and-cytotoxic-properties-of-primula-vulgaris-leaf-extract
 - Worwood, V. (1990). *The Fragrant Pharmacy*. London, United Kingdom: Macmillan London Ltd.



DO YOU WANT TO CONTRIBUTE TO THE HERBAL EYE ?

Share, Create & Engage!

We are looking for Herbalist Authors to help us with adding content to the Herbal Alliance Journal.

Can you help?

Content can range from articles on Herbal Medicine, Science, Recipes, Formulae, Reviews, Poetry and so on. This is an opportunity for you to share content you have already written or exclusive material with Professional Associations and their members as well as other Herbalists. Also, to have a small paragraph about yourself, what you do and your website / social media channel(s). Interested?

Upon submission, our editorial team will choose what pieces will feature in the next issue. We will prioritise articles and submissions that are closely themed to the Season of the issue in question. Our next journal is due for the **Summer Solstice** and thus the theme will be centred around this, so get your thinking hats on!

HOW TO SUBMIT:

- Make sure your content is formatted in an easily copyable format such as a Word Document, Open Office or likewise. PDFs are NOT suitable as we cannot easily grab the formatted text.
- 2. Attach any images you wish to add separately and make sure they are large enough (a minimum 1000px width/height).
- 3. Write a short description about yourself. This must be one or two phrases long. You can add a photograph of yourself too if you wish.
- 4. Send us your FULL NAME, and PROFESSIONAL ASSOCIATION (If applicable) along with any letters, job names or titles you wish us to add to your profile.
- 5. Send us your Practice or Company name if you wish, website &/ or social media channel(s).



SUPERMOON FORAGING

By Kaye Angus



"THERE IS NOTHING-ABSOLUTELY NOTHING-HALF SO MUCH WORTH DOING AS SIMPLY MESSING ABOUT IN BOATS"

- Kenneth Graham

WIND IN THE WILLOWS, CHAPTER 1, THE RIVER BANK

nevitably I'm wearing sandals. I didn't have the foresight to wear shoes in the morning, so, I do not rush, but pick slowly and carefully, bright evening sunshine giving way to a translucent light from the full supermoon. She edges her way up over the skyline; I pick my way between



burnt Yarrow heads and criss-cross up and down plucking off sturdy Bird's Foot Trefoil blooms along the hedge banking. Although I've been in my clinic all day I push on; there's another heatwave coming, and I lost out on the Honeysuckle already.



I cannot easily discern distance; I find I'm slowing down even more. I put the flowers into a plum tub, then, half full, empty them into a supermarket net-veg bag. If I trip up, I only lose half a tub. These amazing little bags costing about 35p are pre-stashed in all pockets, rucksacks, car glove box, and onboard the boat drying Horsetail and Hart's Tongue Fern. I notice occasional Red Clover in between rocks and think "good on you", hanging on in there through all this scorching hot wind and sun. Eventually my bag is full; I look behind me and I'm satisfied I cannot see where I've been collecting (one of my criteria is not to over pick), and as I climb up over the steps crossing the bridge through the evening bat flurry, I sense a swimming spot down past the lock gates where the canal joins the river. That's where I'm going tomorrow morning, I say to myself.

There's quite a bit of talking to oneself in boat life. Chugging along, the engine noise is just a tad loud to call a friend and anyway you never know what you might meet coming round the next bend - a fallen tree, a boat under a bridge, twenty children shrieking in canoes, or a fine example of our flora and fauna abundance. There are kingfishers to say hello to, water voles if you are up early enough, otters - same, even turtles, and all manner of ducks, swans, geese, coots, moorhens, and herons all doing their own thing. Sometimes you wake to hear them pecking fresh algae and weed off the hull - quite loud at 4am!

There are advantages to being a solo cruiser; you can stop and gather flowers, berries and even watercress picked off the lock gates for dinner. In the morning when you can't remember where you are, that moment can last a fair while! No kidding, these are the best bits, there's also a lot of dusty, dirty hard graft but that's the same with most low impact lifestyles. We exchange each level of luxury and convenience for more of our own blood, sweat and even occasional tears. I spent a whole week of this summer blacking



the hull of *Evanthia*, living out of the water on a slipway, grinding rust off and applying three coats of bituminous paint. You only get a week to do it; all your shopping has to be carried up and down the ladder and each day ends with emptying all the flaking paint out of your bra! I devised a way of covering my head with a cold wet scarf, wore safety goggles and headphones, clicked play on Lady Killers - a Victorian Murderesses podcast from a feminist perspective and topped the whole lot with a plastic bag - a fashion that definitely won't be catching on!



As I wait for the elderberries to ripen, I check my stock levels for bottles, labels and spices. I also make quite a few batches of Hawthorn ketchup, and this relies on dates and spices too. I proudly sell out every season, although this year I did manage to keep my own cupboard stocked until Lammas when the new berries began to turn red. I believe in making herbal medicine accessible and ketchup goes down well with the whole family. Over the last decade I've seen Herbal Medicine and Foraging become more acceptable - even trendy. Since the big C pandemic there has been a huge positive interest in self-care and natural well-being. I have sold herbal teas and remedies to a much wider demographic than I ever did in the noughties and for this I have heaps of gratitude. I'm even starting my own sourdough, thinking nettle seed rolls might sell and I charge 50p for a Gypsy style peg made

"THERE ARE ADVANTAGES TO BEING A SOLO CRUISER; YOU CAN STOP AND GATHER FLOWERS, BERRIES AND EVEN WATERCRESS PICKED OFF THE LOCK GATES FOR DINNER"

from Willow and recycled cans!

I am also hugely grateful for our National Heritage 2,000-mile canal system which allows me to travel slowly and carefully, amongst the natural and beautiful places I love and gather the variety of plants I can find along the way. I've discovered square stemmed St. John's Wort I can top up my regular supplies with and the Cuckoo Flower and White Deadnettle is abundant. For the most part, 'the cut' as our canals are affectionately called, is home to many cheerful chappies who wave and smile, giving me the thumbs up at the sight of my culinary herb garden on deck. I've heard the ratio of men to women out here is 5:1, so I do get stared at sometimes, but in a previous life I was an HGV driver, so I'm probably used to it. Manoeuvring a nearly 60-foot steel hull into a tight space sometimes reminds me of my lorry driving days, transferable skills and all that.



I have to plan my annual trading routes carefully, booking floating markets six months ahead but for as long as I can, I will be a liveaboard canal boater - people often say it's like one long village. The waterways are a great way to meet people and have conversations about all manner of things. It's interesting to 'share water' in double locks, swapping stories and tips on cheapest diesel/nice moorings/friendly pubs/dilapidation through major cities due to spending cuts.

Sometimes, thankfully not often, I find I cannot get a gate to open, and I just have to wait until someone willing to help comes along. The costs involved in repairing the infrastructure must be rising just like everything else. One new set of lock gates can set Canal and River Trust back £40,000, so it's not surprising investment in water points, and disposal services is slow.

We have Trade Associations and lobbying groups and 'no-go' zones and there's the Haves and the Have-nots. The towpaths get muddy in winter, canals pass under and parallel to dual carriageways, motorways, aircraft flight paths, along aqueducts, and slosh past grimy factories, but for the most part I feel privileged to moor in interesting or beautiful places and I would be hard pushed to find a more suitable life to suit my pocket.



<u>Article by</u> <u>Kaye Angus, AMH member, Iridologist, Reflexologist,</u> Acupuncture & Tui Na Practitioner

She runs a micro-clinic on board narrow boat *Evanthia*, offering a range of treatment options. She does indoor markets in Winter and outdoor in summer. Floating markets are the backbone of the business. She uses her own massage and analgesic products in practice. Kaye works at Cycles of Change Acupuncture in Barrow Upon Soar, Leicestershire where there is a small shop selling her own products and medicinal mushrooms.

She is an experienced beekeeper, using beeswax, propolis and honey to create her own range of health products.

Her long-term goal is to move back to the West Coast of Scotland, where she forages seaweeds annually during spring tides. Seaweeds are part of both Asian and Western Traditional Medicine, being highly concentrated functional food forms and a tonic to immune and cardiovascular systems.

www.littlehouse.garden

@kayeslittlehouse





MONOGRAPH WESTERN HERBAL MEDICINE

HAWTHORN Crataegus spp.

By Kathleen Jones



"The risen cream of all the milkiness of Maytime" - Bates, 1935

Hawthorn flowers and leaves in May

INTRODUCTION

n this monograph, I will discuss hawthorn's names, botany, and ethnobotany, history, and folklore, along with contemporary uses and research, and constituents. Furthermore, I will discuss my own experiences with hawthorns in my garden with photos, organo-leptic tasting, and tincture making.

NAMES

Hawthorn means "hedge-thorn" (Bruton-Seal, 2021). *Crataegus* comes from the Greek kratos, which means strength (Taylor, 2021). The two British species are *Crataegus monogyna* Jacq. (Hawthorn) and *Crataegus laevigata* (Poir.) DC. (Woodland or Midland Hawthorn) (Mabey, 1996; Streeter, 2016). *Crataegus spp.* have many vernacular names including may-tree, whitethorn, thorn-bush, white-may, quick-thorn, quick, mother-die, and bread-and-cheese (Mabey, 1996). The maytree is the only British plant to be named after the month in which it flowers (Mabey, 1996). *Crataegus laevigata* was formerly known as *Crataegus oxyacanthoides* (Thuil.)

BOTANY

Crataegus monogyna is a dicotyledon, grey fissured-barked thorny tree, from the Rose family, *Rosaceae*, that grows to ten metres. The lobes of its tough-feeling leaves are longer than broad; sinuses extend more than halfway to midrib; the lower margins of the lowest lobe are without teeth. The flowers are 15 mm across or less, with one style; the fruits have one stone. *Crataegus monogyna* occurs in hedging, scrub land and woodland (Streeter, 2016). The parliamentary enclosures of the eighteenth and nineteenth



centuries resulted in around 200,000 miles of hawthorn hedges being planted (Mabey, 1996). *Crataegus laevigata* is similar, but it has more spreading branches, with shallowly-lobed leaves, with sinuses reaching less than halfway to midrib, and the lower margin of the lowest lobe is toothed nearly to the base. Its flowers are 15 mm across or greater, and it has two styles and two stones. *Crataegus laevigata* occurs on ancient woodland, in old hedgerows and on clay soils. *Crataegus laevigata* flowers one to two weeks earlier than *Crataegus monogyna*. Hybrids are common (Streeter, 2016).



Hawthorn boundary hedge in May

ETHNOBOTANY, HISTORY, AND FOLKLORE

Marke the faire blooming of the Hawthorne tree Who finely cloathed in a robe of white,

Fills full the wanton eye with May's delight (Chaucer, n.d.).

The may-tree is the original maypole, with flowers used as May Day garlands, including for statues of the Virgin Mary in Ireland; hawthorn leaves were used in carvings of the Green Man in inns and churches in Britain. The calendar change in 1752 means that May Day used to occur on what is now the 12th May, when hawthorns usually break into bloom, depending on location, and the observation that hawthorn is influenced by the weather in its flowering (Mabey, 1996).

When I read Gabrielle Hatfield's Memory, Wisdom and Healing: The History of Domestic Plant Medicine, I was surprised that there were not any domestic records of hawthorn use as medicine; only a reference to children eating the leaves as "bread and cheese" (Hatfield, 2005). Hatfield's survey was extensive, so this made me wonder if the lack of mention of hawthorn was due to people not wanting to take hawthorn as medicine due to its folklore connections with the fairies, and superstitions such as it being bad luck to take hawthorn into the house, which is where the name motherdie comes from; this superstition may possibly originate from the Reformation, with people practising such pagan-perceived rituals labelled as papist by Puritans; being a papist could lead to fines, imprisonment or death (Hatfield, 2005; Mabey, 1996). Intrigued by hawthorn's lack of presence in British domestic medicine, I contacted the Herbal History Research Network, who concurred that it has been little used in this regard (Herbal History Research Network, 2021).

This lack of domestic use is echoed in Ireland. The National Folklore Collection was an extensive survey conducted from 1935 in order to preserve the rich folklore including domestic medicine from being lost, partly due to the loss of the Irish language because English was introduced as the medium for education in schools. As part of the survey, primary school children interviewed their grandparents about medicines. Hawthorn does not seem to feature much as a domestic medicine, with cure references pertaining more to sympathetic-magical healing such as wart cures involving rubbing a snail on the wart, then piercing the snail on a hawthorn tree; when the snail died, the wart simultaneously vanished (National Folklore Collection [NFC], n.d.). After reading Rosari Kingston's book Ireland's Hidden Medicine, I contacted Rosari to enquire about Irish domestic use of hawthorn; Rosari concurred its predominance in Irish history and folklore as connected with the fairies and



not in domestic medicine (Kingston, 2021a, b). Allen and Hatfield also found that hawthorn's presence in domestic medicine was slight compared with its prominence in folk tradition. They discovered that the Irish Schools' survey contains two records only for domestic medicine use: for toothache and as part of a salve for burns. They found some examples of hawthorn being employed occasionally domestically in Britain, including as a heart tonic and blood pressure balancer (Allen and Hatfield, 2004). Culpeper describes hawthorn as a remedy to help people with illnesses including oedema (dropsy), which can be due to right-sided heart failure, and stones (Culpeper, 2020).

PERSPECTIVE TRADITIONAL CHINESE MEDICINE

Crataegus pinnatifida has been used in China since around 700CE (for food stagnation) and adopted as a heart remedy in the last 30 years.



Hawthorn buds (left) and Tree (right) in May

CONTEMPORARY USES AND RESEARCH

Priest and Priest (1983) describe hawthorn as a cardiac tonic trophorestorative, with a primary action on the myocardium, and an ability to augment and sustain the function of the heart and arterioles. It has a positive inotropic effect: increasing the efficiency and quality of the muscular contraction of the heart (Ralph & Tassell, 2020). Hawthorn slows the heart rate if it is too high: a chronotropic effect (Darrell, 2020). Hawthorn improves circulation to the heart and peripheral circulation, lowers blood pressure, reduces oversensitivity of the heart and regulates rhythm disturbances; it is antisclerotic, hypocholesterolaemic, cardiotonic, and mildly diuretic (Ralph & Tassell, 2020; Zorniak et al., 2017; Wang et al., 2013; Holubarsch et al., 2018; Pittler et al., 2008). The British Herbal Pharmacopoeia (BHP, 1983) lists hawthorn as helpful for myocardial weakness, cardiac failure, arteriosclerosis, hypertension, Buerger's disease (a rare disease of the arteries and veins of the arms and legs, where the vessels become inflamed and can become blocked with clots) and paroxysmal tachycardia, with specific indications listed as angina pectoris, and hypertension with myocardial weakness. The BHP (1983) states the dose of dried fruits as 1-2 ml of a 1:5 45% tincture three times daily, 0.5-1ml of a 1:1 liquid extract in 25% alcohol three times daily, or 0.3-1g as an infusion three times daily.

Taylor (2021) lists the doses as 5 ml of a 1:3 tincture (% not listed), one to three times a day, or an infusion of 3-5g one to two times daily, with care taken with those with low blood pressure. Taylor (2021) associates hawthorn with the element fire, the planet Mars and the choleric humour, and an ability to clear excess moisture; hawthorn calms, protects and heals a broken heart (Taylor, 2021). Energetics: cold and dry in the first degree (Taylor, 2021); warming and drying (Ralph and Tassell, 2020); flowers cooling, berries warming (McGovern, 2021). Mességué prescribed hawthorn hand and foot baths as a tranquiliser for spasmodic pain (Mességué, 1981).

Hawthorn energises cells and confers mitochondrial support, and detoxifies heavy metals via the cellular transcription factor



nuclear factor erythroid 2-related factor 2 (Nrf2) (Bone, 2021). World Health Organisation (WHO) data showing a tiny number of adverse events are not validated as being due to hawthorn (Ralph and Tassell, 2020). Hawthorn is supportive and gentle, yet can have profound healing effects (Conway, 2001).

In a two-year study, Holubarsch and colleagues (2008) studied the effects of a Crataegus-based extract (WS1442) in patients with chronic heart failure, classified as New York Heart Association (NYHA) stage 2 & 3 heart failure. WS 1442 is standardised to contain 18.75% oligomeric procyanidins. 2681 patients were randomised to receive 900 mg/day WS1442 or placebo, in addition to their usual treatment. Holubarsch et al found a significant reduction in sudden cardiac death among the cohort subgroup with a left ventricular ejection fraction greater than or equal to 25%. Reduction in cardiac death was statistically significant: 39.7% (hazard ratio 0.59 [0.37;0.94] at month 24; p=0.025). WS1442 was found to be efficacious and well tolerated. The

results suggest suitability for Crataegus extracts for people with NYHA stage 2 heart failure. The use of a standardised extract, in this study, means that the dose is controlled. However, the limitations of this study include that it is in a clinical setting, and that an extract is being used. Part of the herbalist's role is eliciting the patient's own self-healing response, and the relationship between the herbalist and the patient, the time given, and the non-hospital, relaxed atmosphere are integral parts of the healing process. These important factors contributing to healing are unlikely to be recreated in a hospital setting. The whole plant is more complex and meaningful for healing than an extract, offering multiplicity, and the intentions and gratitude given when the plant was harvested, the herbalist-plant relationship, and patient-plant relationship are vital factors. Perhaps whole plant medicine is best for patients in part due to our co-evolution with plants and shared common ancestry. Whole plants may heal in a vibrational and energetic way too; this is reminiscent of the findings of quantum physics.



Left: Hawthorn berries macerating. Right: Organo-leptic tea-tasting diagram.



CONSTITUENTS

Oligomeric procyanidins; antioxidant flavonoids including vitexin, rutin, quercetin, and hyperoside; triterpene acids, including ursolic and crataegolic acids; phenolic acids, including caffeic acid (Hoffman, 2003). The flavonoids aid regeneration and strengthening of damaged and inflamed tissue, and help dilate and relax blood vessels; rutin helps to stabilise and repair blood vessel walls (Taylor, 2021; Darrell, 2020). The compounds in hawthorn act synergistically; the leaf, flower and fruit combined may offer the greatest therapeutic benefit (Tassell, 2010; Ralph & Tassell, 2020). David Winston is quoted as stating: "The active ingredient in hawthorn is ... hawthorn' (Irvine, n.d.). A tincture of the leaves and flowers in spring can be made, and then used to make a tincture of the berries in autumn, and vice versa (Tassell, 2010; Butler, 2021).



Hawthorn buds (left) and Tree (right) in May

HAWTHORN IN PARTNERSHIP WITH OTHER **HERBAL ALLIES**

Taylor (2021) mentions that when trying to lower high blood pressure, it can be effective to combine the cooling properties of hawthorn, with the warming, releasing qualities of yarrow (Achillea millefolium L.), lime blossom (Tilia spp. L.), and guelder rose (Viburnum opulus L.). Taylor (2021) recommends a combination of hawthorn, rose flowers (Rosa spp. L.) and lemon balm (Melissa officinalis L.), as a tea, tincture, powder, or pills, to help with feelings of broken-heartedness, grief, anguish, and despair. The British Herbal Pharmacopoeia (BHP) (1983) recommends hawthorn in combination with grandiflorus (night-blooming Selenicereus cactus), Tilia spp, Viscum album L. (mistletoe) or Scutellaria lateriflora L. (skullcap).



Hawthorn buds (left) and Tree (right) in May



St Ciaran's Bush, dividing the road between Birr and Kinnitty, County Offaly, Ireland. The road is routed around the tree, to avoid destroying it, as lone hawthorns are revered as connected to the fairy realm. Rags that have been in contact with a person with an illness or wound are attached to the tree; it is believed that when the rags rot away the person is cured.

Credit: Dougf.



MY EXPERIENCE WITH HAWTHORN, INCLUDING PHOTOS

We have many hawthorns in our garden: one solitary perhaps older tree, many trees as part of hedging which are over 150 years old, and saplings that have arisen naturally. The flowering time varies between different trees, depending on their location in our garden, and is variable depending on the weather. Organo-leptic tasting of infusion of dried leaves and flowers: rich, sweet, flowing, repairing, comforting (please see tasting diagram below).

I made a tincture with 40% vodka over fresh hawthorn berries. Brandy can be used instead of vodka; hawthorn berries tinctured in brandy is a traditional heart tonic (Darrell, 2020). The hearty red colour of hawthorn tinctures is reminiscent of the colour of blood; this observation ties in with the doctrine of signatures. Food and medicine are a continuum; hawthorn recipes include sauce, jelly, spring pudding, and spiced wine (Mabey, 2004; Simmonds, 2016). The berries can be made into fruit leathers, as a storage method (Darrell, 2020).

SUMMARY

To conclude, hawthorn is a wonderful, supportive herbal ally; it is gentle, yet has a strong healing ability. Hawthorn has an important place in folklore, and is a key herb that medical herbalists work with today, often to support patients with their circulation and heart. The whole plant acts synergistically; furthermore, hawthorn combines well with other herbs, and can help as a matrix for prescriptions focusing on the cardiovascular system.



<u>Article by</u> <u>Kathleen Jones</u>

Kathleen Jones is our student editor here at Power of Plants magazine. Originally from London, Kathleen now lives with her family in Ireland. She is currently studying herbal medicine at Heartwood Education and upon graduating is hoping to make a therapeutic garden and open an apothecary shop, clinic, and dispensary. She is keen to serve her small, tight-knit community.

References

- Allen, D. E. and Hatfield, G. (2004). Medicinal Plants in Folk Tradition. Portland: Timber Press.
- Bates, H. E. (1935). Wild Trees in Blossom. Available at https://hebates.com/library/ wild-trees-in-blossom (Accessed 20 June 2022).
- British Herbal Pharmacopoeia. (1983).
 Exeter: British Herbal Medicine Association.
- Bone, K. (2021). Functional Herbal Therapy: Overview and Key Concepts. National Institute of Herbal Medicine Annual Conference Presentation. Limited

Access.

- Bruton-Seal, J. and Seal, M. (2021).
 Hedgerow Medicine, Ludlow: Merlin Unwin Books.
- Butler, C. (2021). Personal correspondence.
- Chaucer, G. (attrib.; n.d.). Quoted by Christopher Hobbs: *Hawthorn: For the Heart.*
- https://www.christopherhobbs.com/ library/articles-on-herbs-and-health/ hawthorn-for-the-heart/
- Conway, P. (2001). *Tree Medicine*, London: Hachette/ Little, Brown Book Group.
- Culpeper, N. (2020 [Original work 1653]).



Culpeper's Complete Herbal. Arcturus Publishing, Kindle Edition. (DOI not listed).

- Darrell, N. (2020). Conversations with Plants, London: Aeon Books.
- Hatfield, G. (2005). Memory, Wisdom and Healing: The History of Domestic Plant Medicine. Thrupp, Sutton Publishing Limited.
- Herbal History Research Network. (2021). Personal correspondence.
- Hoffman, D. (2003). *Medical Herbalism*. Rochester: Healing Arts Press.
- Holubarsch, C. J. F. Collucci, W. S., et al. (2008). The efficacy and safety of Crataegus extract WS® 1442 in patients with heart failure: the SPICE trial. *European Journal of Heart Failure.* 10(12):1255-1263. Available at https://doi.org/10.1016/j.ejheart.2008.10.004 (Accessed 20 June 2022).
- Holubarsch, C. J. F., Colucci, W. S. and Eha, J. (2018). Benefit-risk assessment of Crataegus extract WS 1442: an evidencebased review. American Journal of Cardiovascular Drugs, 18:25-36. Available at https://doi.org/10.1007/s40256-017-0249-9 (Accessed 20 June 2022).
- Irvine, H. (n.d.). *Hawthorn*. Available at: https://www.herbrally.com/monographs/ hawthorn (Accessed 20 June 2022).
- Kingston, R. (2021a). *Ireland's Hidden Medicine*. Lewes: Aeon Books.
- Kingston, R. (2021b). Personal correspondence.
- Mabey, R. (1996). *Flora Britannica*. London: Sinclair-Stevenson.
- Mabey, R. (2004). *Food for Free*. London: HarperCollins.
- McGovern, B. (2021). Personal correspondence.
- Mességué, M. (1981). Health Secrets of Plants and Herbs. London: Pan Books.
- National Folklore Collection. (n.d.) Available at https://www.duchas.ie/en/ src?q=snail&t=CbesTranscript (Accessed 20 June 2022).
- Pittler, M. H., Guo, R. and Ernst, E. (2008). Hawthorn extract for treating chronic heart failure. *Cochrane Database Systems Review*, 23(1) CD003512. Available at Doi: 10.1002/14651858.CD005312.pub2 (Accessed 20 June 2022).
- Priest, A. W. and Priest, L. R. (1983). Herbal

Medication: A Clinical and Dispensary Handbook, Exeter: C. W. Daniel.

- Ralph, A. and Tassell, M. (2020). Native Healers: Foundations in Western Herbal Medicine, London: Aeon Books.
- Simmonds, M., Howes, M-J. and Irving, J. (2016). The Gardener's Companion to Medicinal Plants, London: Frances Lincoln.
- Streeter, D., Hart-Davies, C., Hardcastle, A., Cole, F. and Harper, L. (2016). *Collins Wild Flower Guide* (2nd edn), London: HarperCollins.
- Tassell, M. C., Kingston, R., Gilroy, D., Lehane, M. and Furey, A. (2010). Hawthorn (Crataegus spp.) in the treatment of cardiovascular disease. *Pharmacognosy Reviews*, 4(7):32-41. Available at DOI: 10.4103/0973-7847.65324 (Accessed 20 June 2022).
- Taylor, S. (2021). The Humoral Herbal: A Guide to the Western Energetic System of Health, Lifestyle and Herbs. London: Aeon Books.
- Wang, J., Xiong, X. and Feng, B. (2013). Effect of Crataegus usage in cardiovascular disease prevention: an evidencebased approach. Evidence-based, Complementary and Alternative Medicine, Article ID 149363, 16 pages. Available at https://dx.doi.org/10.1155/2013/149363 (Accessed 20 June 2022).
- Wildflowers of Ireland. (n.d.). Information on Hawthorn. Available at http://www. wildflowersofireland.net/plant_detail. php?id_flower=116 (Accessed 20 June 2022).
- Zorniak, M., Szydlo, B. and Krzeminski, T. F. (2017). Crataegus special extract WS 1442: up-to-date review of experimental and clinical experiences. *Journal of Physiology* and Pharmacology, 68(4):521-526. DOI not listed.





HAVE YOU LISTED YOUR PRACTICE ON OUR FIND A HERBALIST FEATURE YET?

It's free and easily accessible on the side panel menu of the Herbal Alliance Members' Portal. If you already have an account with us, please login and follow the link below:

WWW.HERBALALLIANCE.UK/ADD-LISTING/

ARE YOU BASED IN THE UK OR IRELAND AND HAVE YOU NOT SIGNED UP FOR YOUR HERBAL ALLIANCE ACCOUNT YET?

SIGN UP USING THE BELOW LINK:

WWW.HERBALALLIANCE.UK/JOIN-AS-A-MEMBER/

PRE-METRIC UNITS

ANCIENT GREEK AND ROMAN WEIGHTS AND MEASURES

Term	Weight *	Rounded		
Obol	0.568g	600mg		
Triobolon	1.794g	1800mg		
Drachme	3.411g	4g		
Holce	3.411g	3.5g		
Mina	436.6g	437g		
	Volume			
Cyathos	0.0456 L	45mL		
Oxybaphon	0.0684 L	70mL		
Cotyle	0.247 L	274mL		
Sextarius	1 Avoirdupois pint	578mL		
	12 Cyathi **	540mL		
*As given in Beck (2005), after Berendes. See also Richardson (2004). **Richardson (2004)				

**Richardson (2004).

TABLE OF SYSTEMS OF WEIGHT (MASS)*			
Metric SI units	Avoirdupois (Impreial)	Apothecaries' weights	
Microgram (µg/mcg) 1000 mcg = 1 mg	1 grain** = 65 mg	1 grain** = 65 mg	
Milligram (mg) 1000 mg = 1 g		1 scruple = 20 grains = 1300 mg	
Gram (g) 1000g=1kg	14 oz = 7 g 12 oz=14g 1 ounce (oz) = 437.5 grains = 28.3 g (round to 28 g) 1 pound (lb) = 7000 grains = 16 oz = 454 g	1 drachm = 60 grains = 3900 mg 1 ounce = 480 grains (8 drachms) = 31.2 g (round to 31 g)	
*For each system read down the column from the smallest unit			

**The grain is the same in both systems. No abbreviation as could be confused with g.

TABLE OF SYSTEMS OF MEASURES (VOLUME)*				
Metric SI units	I units Avoirdupois (Impreial) Apothecaries' w			
Millilitre (mL)	1 minim = 0.06 mL 1 fl oz = 480 minims = 28.8 mL (round to 30 mL)	1 minim = 0.06 mL 1 fl scruple = 20 minims 1 fl drachm = 60 minims = 3.6 mL 1 fl oz = 480 minims = 28.8 mL (round to 30 mL)		
Litre (L) 1000 mL = 1 L	1 pint = 20 fl oz = 568.5 mL 1 quart = 2 pints 1 gallon = 8 pints			
*For each system, read down the column from the smallest unit.				

These tables can be found with more in depth information in the following book:

Tobyn, G., Denham, A., & Whitelegg, M. (2016). Chapter 5: Notes on nomenclature, plant descriptions, quality, constituents, safety and dosages. *In The Western Herbal Tradition: 2000 years of Medicinal Plant Knowledge* (pp. 41-45). London: Singing Dragon.

This list has been kindly authored by Alison Denham.

Alison Denham, FNIMH, MA. Alison has a long-standing interest in the safety of herbal medicines which developed from her work as NIMH Director of Research and is a former Member of the MHRA Herbal Medicines Advisory Committee. Her current research is on the publications of John Skelton (1805-1880) who was a leading Chartist and later a prominent herbal practitioner.



www.researchgate.net/profile/Alison-Denham-2



PRESCRIPTION TERMS

Latin	Abbreviation	Meaning	Latin	Abbreviation	Meaning
1	1	to, up to, suffi-	lotio	lot.	lotion
ad	ad cient to produce		mane	M.	morning
ana	aa, a a	of each	mel	mel	honey
ante	a	before	misca	М	you mix
ante cibum / cibos	a.c.	before foods /	mistura	mist.	a mixture
		meals	mitte	mitt.	you send
		at one's pleasure (similar to p.r.n.	mododicta	m.d.	as directed
ad libitum		though without maximum dose indicated)	mucilago	mucil.	a mucilage
			naristillae	narist.	nose drops
			nocte	noct. n	at night
aqua	aq.	water	oleum	ol.	in oil
aqua bulliens	aq.bull.	boiling water	per os	per os	by mouth
aqua distillata	aq. dist.	distilled water	pilula(e)	pil.	pill(s)
aqua calida, aqua fervens	aq. cal., aq. ferv.	warm water, hot water	post cibum/cibos	p.c.	after food / meal
aqua gelida	aq. gel.	cold water	pro re nata	p.r.n.	as/when required
auristillae	aq. gci. auristill.	ear drop	pulvis	pulv.	powder
bis (in) die	b.i.d., b.d.	twice a day	quantum sifficiat	q.s.	as much as is suf- ficient
capsula(e)	cap	capsule(s)	quarter in die	q.i.d.	four times a day
collyricum	collyr.	an eye lotion	recipe	R., Rx, Rp	Take thou
cum aqua	cum aq.	with water	semil die	s.d.	once a day
cum cibo	c.c.	with meals	semi	S.S.	one half
decoctum	decoc.	a decoction	sigura	sig.	write
dilutum	dil.	diluted	simplex	simpl.	simple
elixer	elix.	elixir	sine	S.	without
emplastrum	emp.	a plaster	sin aqua	s. aq.	without water
emulsum	emuls.	emulsion	spiritus	sp.	spirit
ex aqua	ex. aq.	with water	sternitarnentum	sternit.	snuff
fotus	fot.	fomentation	suppositaria	suppos.	suppository
gargarisma	garg.	a gargle	syripus	syr.	syrup
gutta(e)	gtt.	drop(s)	tabella	tab.	a tablet
infusum	inf.	infusion	ter die sumendum	t.d.s.	three times a day
insufflatio	insuff.	insufflation	ter in die	t.i.d., t.d.	three times a day
inhalatio	inhal.	inhalation	tincturia	tr., tinct.	a tincture
intercibos	i.c.	between meals	ungentum	ung.	ointment
linenentum	lin	a liniment			

This list has been kindly supplied by Dr. Graeme Tobyn.

Dr Graeme Tobyn **gwtobyn@uclan.ac.uk** has among his doctoral students herbalists writing their theses in the School of Community Health and midwifery but the BSc and MSc Herbal Medicine courses are long closed. Graeme's most recent publication is 'How England first managed a national infection crisis: Implementation of the Plague Orders of 1578 compared with COVID-19 Lockdown March to May 2020' https://pubmed.ncbi.nlm.nih.gov/34173509/





