# How to Source High Quality Botanicals Your free guide

A deep love for plant medicine, and simultaneous horror at the state of the supplements and herbal industry inspired this resource. Whether you buy from me or not, I want you to be able to navigate this busy often overwhelming industry with more confidence and awareness on how to spot the good from the bad.

Isn't it horrifying to learn that some of the most expensive and fancy brands sometimes have none of the plant they claim to have in? Or some do, but not of medicinal grade and they are also mixed in with lots of other rubbish. Unfortunately, a vast majority of the public assume that if something is sold on the shelves it has been highly regulated, and must be of high quality to be there. You would assume that the label tells you what is in there right? Wrong.

In fact, a <u>study</u> that analysed nearly 6,000 herbal products sold across 37 countries concluded that in Europe 47% of products did not contain what was stated on the product. In North America it was 33%, and in Australia a shocking 79%.

Another study showed that out of 35 gingko biloba products bought in the UK, 33 of them had been adulterated either intentionally or by accident. That means only TWO of them were of medicinal grade, some of them didn't have any gingko in.

So I am here to guide you, and arm you with some stats, tips and tricks that will make you more savvy when shopping botanicals. Firstly I will explain the main problems, and then I will share with you my best advice on sourcing quality products.

By the way if you want a more in depth article on this, you can read one I wrote with a colleague on my academic website <a href="here">here</a> under <a href="mailto:">Botanical Quality Control Guide</a>"

# The problems

#### Poor botanical identification

When companies receive their powder or liquid extract, it's really hard to tell what plant it actually is and unfortunately plants often get

#### Plant names get mixed up

Plant nomenclature is COMPLEX to say the least. One species can have twenty different common names, and one common name can be for twenty different species. Needless to say this doesn't help with the whole "getting plants mixed up" situation.

#### Adulteration and contaminations

This is a problem that I think is particularly terrible. Companies swap out plants and fill it in with different plants that look similar, but are cheaper (and do nothing medicinally). Worst still sometimes they mix products with all sorts from sawdust, to pharmaceuticals or in some cases illegal substances.

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### Lack of traceability

Supply chains become so long that it becomes really difficult to track where the plant originated, making it nearly impossible to know what has been done to the product by the time it gets from the farm to you.

#### Post-harvest processing

Post-harvest processing includes drying techniques, extraction, storage and transport. How well the valuable chemicals in the plant are kept can be affected massively by this stage, and plants can degrade in quality rapidly.

## Problems with a rapid rise in popularity

When a plant becomes very popular quickly, it becomes at high risk of quality issues, as people will adulterate and contaminate products to have more goods to sell. Also, unsustainable overharvesting of medicinal plants in the wild becomes common practise, which can have devastating effects on communities and driving plants to near extinction.

#### **Exploitation**

Farmers are frequently exploited and their prices are undercut. Sometimes people find plants that communities have been growing and using traditionally for a very long time (e.g indigenous people). They take the goods and make a fortune- with no equity for the original gatekeepers of knowledge. This is something called biopiracy, and whilst there are now more regulations in place to prevent this exploitation is still a problem.

#### Lack of awareness

My research shows that one of the main issues is that consumers and manufacturers often just don't know about these problems (a partial incentive for this resource). In the UK people assume something must be well-regulated to go on the high street, but it is not that simple. Therefore, companies get away with it and nothing is done.

Frustratingly people will buy a poor-quality product, it won't work, and then herbal medicines will be dismissed as a whole. This is a great shame and sullies the vast medicinal resources in nature.

# So what to do? Some solutions and top tips

Ask brands where their plants are grown. If they can't tell you then I would be cautious.

Ask brands if they can tell you what species they are using (it will be a latin name with two words- the genus and the species). For example, simply saying "rhodiola" is not enough they should say "rhodiola rosea". There are other types of rhodiola that do nothing medicinally. Use MPNS to check and compare plant

names. This is a FANTASTIC resource that I work on at Kew Gardens, and you can type in any plant (common or Latin name) and it will show you all of the different names it is called, to help make sure you are getting the right species.

Check the packaging, are they keeping their product in clear glass or plastic? If the contents are not protected from light then they will quickly degrade.

If it is packed with ingredients like bulking agents, anti-caking agents and loads of unnecessary additives then I would question the quality of the brand. Getting the right doses of plants into pills is HARD- you need all the space in the pill to be filled with plant! My personal rule is keep the unnecessary additives out.

Again, if there is a huge amount of different plants (e.g 30 plants) in a pill I would be sceptical, how did they fit a big enough dose of each plant in that pill?

If they are making sensationalist claims for example "this product will cure cancer" then avoid. Definitely avoid.

There are schemes such as <u>fair wild</u>, <u>fair trade</u> which aim to increase social, economic and environmental sustainability.

Buy direct from a herbalist! They love their plants, and they know what good medicine is. Does it have a detailed and valid description of its composition and production? For example, does it tell you exactly how many milligrams of each plant is in capsule, or what the extraction ratio of a tincture is? If not be sceptical.

Potential side effects and interactions with other drugs should be listed on the product or website.

If something has this logo on then it means its great quality and has been stringently regulated as its licensed. Unfortunately, this logo is pretty rare as it is only available for some plants in the EU and many companies do not bother with this license. However, if something does have the THR logo then you are good to go!



Companies did not clean up their act with regards to sustainability and global warming, until the public educated themselves and asked questions. I believe this will be the same scenario with the herbal medicines and food supplements industry, so I am sharing with you my knowledge so we can change the narrative. I hope that now you feel empowered with more knowledge to help you make better decisions when it comes to sourcing your medicines (needless to say the ones I sell are top notch).

Laz x