Beyond the pharmacopoeia: The Ethnobotany of everything else

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Editorial

Ask a community elder about a single common plant and listen to the whole answer. The bark tans a hide, and the inner fiber becomes a rope; the young shoots are famine food and the mature stem a tool handle; the flowering marks a season, the ash seasons a dish, wood-smoke keeps insects from the house, a cut branch marks a grave. Somewhere in that answer, perhaps, there is also a remedy for a cough. Now open almost any ethnobotanical journal, this one included and look at what survives the journey from field to page: the cough remedy, with its use-value index, and little else. We have built a rich discipline around a single thread of a much larger weave. This editorial makes the case for recording the whole cloth.

A discipline that became a pharmacopoeia

Ethnobotany began as the study of the whole relationship between people and plants: food and fiber, dye and dwelling, ritual and recreation, tool and toy, fodder and fuel. Its founding manuals treat material culture, subsistence, and belief as central subjects, not footnotes (Cotton 1996; Martin 2010). Yet the published record has narrowed decade by decade, until one genre, the medicinal-plant survey, has become the discipline's default. In much of the regional and open-access literature it is now very nearly the only genre we publish. The scale of this is easy to miss. One bibliometric mapping of the ethnopharmacological literature counted some 59,576 publications by late 2018, most of them in pharmacology, plant science, and medicinal chemistry (Yeung *et al.* 2020). The field is aware of the problem; critics have long complained that ethnobotany reduces a living relationship to a checklist of remedies and indices (Albuquerque & Hanazaki 2009). But the incentives behind the narrowing have barely moved. Open almost any recent issue and the pattern repeat in miniature: a local pharmacopoeia is recorded, the indices are computed, the study is justified by the distant promise of a drug, and the loom, the granary, the dye-pot, and the shrine go unmentioned.

The same pattern runs through our own pages, issue by issue. Of nineteen recent field studies in the three latest volumes of this journal, sixteen were medicinal-plant surveys: local pharmacopoeias ranked by use-value, fidelity level, and informant consensus. Only one set out to record a flora's full use-spectrum, documenting food, fuel, construction, and medicine side by side (Niaz *et al.* 2025). The other two barely looked past the pharmacopoeia. One listed food, veterinary, and ornamental use only to conclude that the medicinal ones dominate; the other treated plants as a subject for science education rather than a record of use. More striking still, several of the medicinal surveys end by calling for local knowledge to be recorded

before it vanishes, while recording only its therapeutic part. The narrowing described here is not someone else's failing. It is visible in the journal you are now reading.

The reasons are easy to understand. Medicinal uses speak directly to a biomedical audience and to the hope of a marketable drug. They fit a familiar template. And they are, frankly, easier to publish. But a convenience has hardened into a distortion. We keep drawing an ever-finer map of one province while the rest of the territory stays blank, and then we mistake the map for the country. A pharmacopoeia is only one slice of a people's botanical knowledge, and rarely the largest or the most important.

What the narrowing costs us

The costs of this are not merely aesthetic. First, we lose whole domains of knowledge that often matter more to daily life than medicine does: the wild greens that carry a household through the hungry season, the grasses and palms that provide shelter and cordage, the tannins and mordants of a local craft economy, the plants that hold ceremony and identity together. In many communities these food and material use form the dense core of the relationship, and medicine sits somewhere near its edge.

Second, and more urgently, non-medicinal knowledge often erodes faster than medicinal knowledge, because its substitutes arrive first. Plastic sheeting replaces thatch and gourd, commercial dye replaces bark, imported staples replace the gathered green, and the manufactured toy replaces the one whittled from a seed. Medicinal knowledge tends to persist precisely because affordable healthcare does not. The knowledge of famine foods and fibers is different: it can vanish in a single generation of rising incomes and shifting tastes, unrecorded because no one thought to write it down (Łuczaj *et al.* 2012; Vandebroek *et al.* 2020). By keeping our attention on remedies, we may be preserving the most durable domain while the most fragile ones slip away behind us.

Third, the bias distorts everything downstream. Conservation priorities lean toward species with pharmacological promise. The food-security and climate-adaptation value held in neglected and underutilized species goes uncounted. And our theories of how botanical knowledge is organized, passed on, and lost are built on an unrepresentative sample. The categories a community actually holds are structured by use across every domain of life (Berlin 2014); study a single domain, and you have described one fragment of a mind and mistaken it for the whole.

Take one well-studied case. The baobab (*Adansonia digitata* L.), the signature tree of the Sahel and a familiar presence across Mauritania, is a whole-cloth species in every sense. Its leaves are among West Africa's most important leafy vegetables; the fruit pulp is an everyday food and drink, and the seeds yield oil; the inner bark peels into a strong fiber that becomes rope, baskets, nets, and fishing line; and the tree gives fodder, shade, veterinary care, and a place in ceremony and belief. A remedy or two as well, of course. One synthesis spanning Benin, Mali, and Senegal recorded some three hundred distinct traditional uses of the baobab across eleven ethnic groups (Buchmann *et al.* 2010; see also Sidibe and Williams 2002; De Caluwé *et al.* 2010). A paper that noted only its medicines would capture a real but narrow corner of that knowledge and leave the rest in silence. This is what the whole cloth looks like in practice.

The opportunity in the overlooked

None of this is a counsel of despair. It is an invitation, and an unusually practical one. Recording the full use-spectrum takes no molecular laboratory and no new grant; it takes only the discipline to ask past the first medicinal answer and to note down what does not fit the template. Nor does it mean inventing a method from scratch. A ready-made framework already exists. Cook's Economic Botany Data Collection Standard (Cook 1995), developed for Kew and the international plant-database community, sorts of plant use into standard classes: food, animal food, materials, fuels, social and ritual uses, and so on. With it, data on food, fiber, dye, and construction can be recorded and compared just as rigorously as in any medicinal survey. The tools for breadth are already on the shelf. What has been missing is the habit of reaching for them.

Several rich seams are waiting to be worked. Wild and neglected food plants sit at the meeting point of biodiversity, nutrition, and climate resilience, and they are enjoying a real scholarly revival (Łuczaj *et al.* 2012). Material-culture ethnobotany, from fibers and dyes to tannins, construction timbers, basketry, and cosmetics, connects directly to rural craft economies and to the value that can be built into local products. Ritual, ceremonial, and recreational uses carry the cultural meaning that a bare use-category list flattens away, and they are often where a plant's importance really lies. Indicator and phenological knowledge, such as the flowering that foretells a rain, a harvest, or a migration, holds ecological understanding that outside

science is only beginning to take seriously (Turner 2016). None of this asks the ethnobotanist to give up medicinal work. It asks only that medicine take its place as one chapter among many.

What this journal will do

Ethnobotany Research and Applications has always defined its scope broadly, and we want to reaffirm that breadth as a working editorial priority, not merely a line in the aims. We will welcome, and actively seek, rigorous studies of food, fiber, dye, construction, ritual, fodder, cosmetic, and recreational plant use, and above all studies that document the whole use-spectrum of a flora rather than extracting only its remedies. The standards this journal has already set (Yebouk 2025a), and its call for research questions that go beyond mere cataloguing (Yebouk 2025b), apply here in full. A study of dyes or famine foods must clear the same bar as a study of remedies: voucher specimens, prior informed consent, and a clear analytical purpose, all under a recognized ethical framework such as the ISE Code of Ethics (International Society of Ethnobiology 2006). Breadth is not a license for looseness. It is simply a wider field on which the same rigor applies.

One objection deserves a direct answer. Non-medicinal documentation, it is sometimes said, is “mere cataloguing”: a list of dyes or famine foods that, unlike a bioassay, tests no hypothesis. The premise does not hold up. The full use-spectrum is exactly where the field's most interesting questions live. Which domains of knowledge erode first, and why? How is use-knowledge divided by gender, age, and livelihood? Does a plant's cultural salience track its material usefulness, or pull away from it? How are the categories a community actually holds organized across domains rather than within a single one (Berlin 2014)? In any case, the objection cuts the wrong way. The hypothesis deficit it worries about is a feature of study design, not of subject matter. It is at least as common in medicinal surveys, many of which record and index without ever asking a question (Albuquerque and Hanazaki 2009). Documenting breadth does not lower the bar of inquiry; it widens the ground on which real questions can be asked. A catalogue becomes evidence the moment it is gathered systematically enough to compare.

To make the ambition concrete, Figure 1 lays out the use-spectrum as a single prompt an author can carry into the field. For any plant of interest, ask after each domain in turn, and record what is actually there rather than only what fits the template.

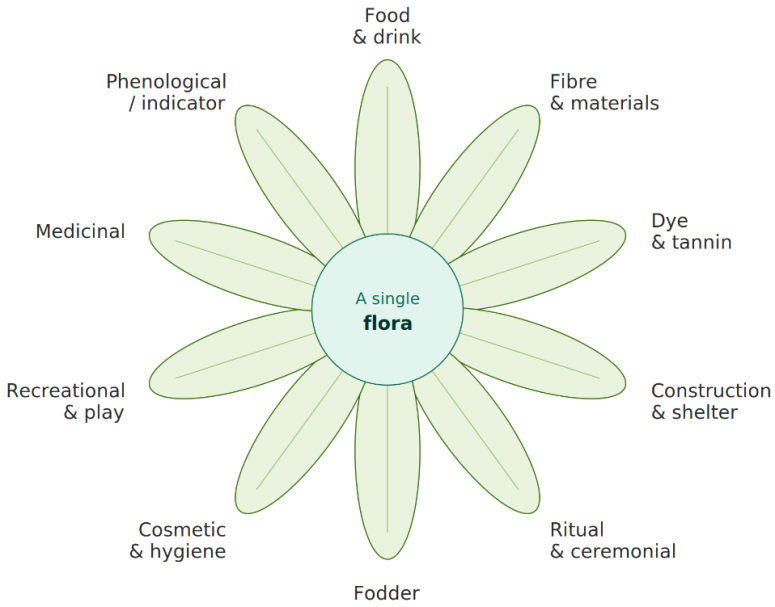

Figure 1. The use-spectrum of a single flora

To our reviewers, we would say only this. When a manuscript records a plant used for cordage, ceremony, or the hungry season with the same care others reserve for remedies, treat it as a contribution to be encouraged, not a curiosity to be tolerated. And to our authors, especially those working with communities whose material and food traditions are slipping away fastest: the most valuable thing you record may not be the medicine at all. Ask the elder the whole question. Write

down the whole answer. The pharmacopoeia is real, and it matters, but it was never the point. The relationship between people and plants is the point, and it is far larger, and far more interesting, than a list of cures.

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