

Turkish Ethnomedicinal Database (TEMDB): A Standardized Dataset of Medicinal Plant Use-Reports in Türkiye

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Research Article

Keywords: Ethnobotany, Medicinal plants, Data standardization, ICD-11, Open science

Posted Date: September 11th, 2026

DOI: <https://doi.org/10.21203/rs.3.rs-10902646/v1>

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Additional Declarations: No competing interests reported.

Abstract

This study describes the development, structure, and standardization protocols of the Turkish Ethnomedicinal Database (TEMDB), a record-level resource consolidating medicinal plant use-reports from published ethnobotanical studies in Türkiye. Individual records are openly accessible through the TEMDB web interface, while bulk dataset access is provided upon request. Searches of Web of Science, Scopus, PubMed, DergiPark, and Google Scholar, followed by eligibility screening, resulted in the inclusion of 37 ethnobotanical studies published between 2018 and 2020. Plant names were standardized using Plants of the World Online (POWO) and World Flora Online (WFO), and International Plant Names Index (IPNI); reported therapeutic uses were harmonized, with medicinal (human-use) records mapped to the International Classification of Diseases, 11th Revision (ICD-11), while ethnoveterinary records were classified separately; and preparation and administration methods followed an adapted version of Cook's Economic Botany Data Collection Standard. TEMDB v1.0 contains 4,384 use-reports, including 163 ethnoveterinary records, covering 826 accepted species, 98 families, and 361 genera, and was designed in alignment with FAIR (Findable, Accessible, Interoperable, and Reusable) principles. As a machine-readable, openly licensed resource with public record-level access, TEMDB supports comparative analyses, data integration, hypothesis generation, and future versioned expansion of Türkiye's ethnomedicinal knowledge base.

Introduction

Türkiye, located at the intersection of three phytogeographical regions (Euro-Siberian, Irano-Turanian, and Mediterranean), harbors a highly diverse flora comprising more than 12,000 vascular plant taxa (Güner et al. 2012), alongside a deep-rooted tradition of folk medicine (Faydaoğlu and Sürücüoğlu 2011). In the last two decades, ethnobotanical field studies have proliferated, documenting thousands of traditional remedies across diverse geographical and cultural communities.

However, this valuable information remains distributed across numerous individual studies published in local and international journals. Differences in terminology and reporting practices across ethnobotanical studies may complicate the integration and comparison of data from multiple sources. These differences may involve taxonomic and nomenclatural variation, including the use of synonyms or outdated names (Rivera et al. 2014), as well as variation in the description of plant preparation, administration, and therapeutic uses (Cook 1995; Weckerle et al. 2018). Similar challenges are relevant to the Turkish ethnobotanical literature, where information on medicinal plant uses has been compiled from a wide range of regional studies and other sources, as illustrated by recent national-scale reviews (Selvi et al. 2022). Such heterogeneity can make the harmonization of independently reported data more difficult and may reduce their direct comparability in broader syntheses, cross-cultural comparisons, and computational analyses (Souza and Hawkins 2020; Weckerle et al. 2018).

Although earlier initiatives sought to compile and digitize ethnobotanical knowledge from Türkiye, their scope and current accessibility remain limited. The Turkish Ethnobotanical Database (TEBVET),

developed by Ospankulova (2005), was an early digital compilation, but its public dissemination was described as a future objective and no currently active public interface could be identified. Urhan et al. (2016) subsequently developed a database focused specifically on food plants, while Bellikçi Koyu (2020) established a broader web-based ethnobotanical database covering literature published between 1928 and 2014. However, we were unable to identify a currently active, publicly accessible interface for the latter resource. These initiatives provided important foundations, but a currently accessible, standardized resource focused specifically on ethnomedicinal use-reports remains lacking. To address this gap, we developed the Turkish Ethnomedicinal Database (TEMDB) as a record-level, machine-readable, FAIR-aligned (Findable, Accessible, Interoperable, and Reusable) resource.

The need for an accessible and standardized ethnomedicinal resource for Türkiye also reflects a broader international trend toward the systematic development of regional medicinal plant databases. A recent global review identified 81 such initiatives established or updated worldwide between 2013 and 2025, with a pronounced concentration in Asia and comparatively limited representation of the Eastern Mediterranean and Middle Eastern regions (Jiang et al. 2026). By providing a standardized and openly accessible resource for Türkiye, TEMDB contributes to addressing this regional gap. TEMDB v1.0 covers ethnobotanical studies published between 2018 and 2020 as the initial temporal segment of a planned, sequentially expanding compilation. Its development involved systematic data curation and standardization, including the application of internationally recognized reference systems such as ICD-11, POWO, WFO, and IPNI, together with the establishment of a structured, machine-readable dataset.

Methods

Data Source and Search Strategy

To construct TEMDB, a literature search was conducted to identify ethnobotanical field studies carried out in Türkiye that documented medicinal or ethnoveterinary plant uses and were published between January 1, 2018, and December 31, 2020. Web of Science, Scopus, PubMed, DergiPark, and Google Scholar were searched using combinations of English and Turkish terms, including “ethnobotany,” “medicinal plants,” “traditional medicine,” “ethnopharmacology,” “folk medicine,” and “Türkiye/Turkey.” The 2018–2020 period was selected as the initial three-year curation block, with adjacent earlier and later publication periods planned for incorporation into subsequent versions. The complete search strategies for each database, including Boolean search strings, search fields, language restrictions, and the date of the final search, are provided in Supplementary Material S1. The numbers of records identified, screened, assessed for eligibility, and ultimately included are reported in Supplementary Material S1 together with the study-selection flow diagram.

Inclusion and Exclusion Criteria

Studies retrieved through the literature search were assessed according to predefined eligibility criteria. Studies were included if they reported original ethnobotanical field research conducted in Türkiye, documented medicinal uses of plants, and provided sufficient record-level information on the scientific name, plant part used, and therapeutic application. Studies reporting ethnoveterinary uses were also eligible; these records were retained as a separate, clearly labeled subset ($n = 163$) and distinguished from human medicinal uses through the dataset's "use type" field. Only peer-reviewed journal articles were included. Graduate theses and dissertations were excluded to maintain a consistent source type and to reduce the potential for duplication where thesis-derived findings had subsequently been published as journal articles. Following eligibility assessment, 37 articles meeting the inclusion and data-completeness criteria were selected for data extraction.

Data Curation and Standardization

Raw data from the selected studies were manually extracted and entered into a structured tabular format. Standardization focused on three main domains: taxonomy, therapeutic-use terminology and medical classification, and preparation and administration practices. In TEMDB, a use-report represents a plant–use association extracted from a source publication, rather than an informant-level use citation. Each record retains its original bibliographic and geographic provenance, and comparable plant–use associations reported independently in different publications were retained as separate records rather than deduplicated across studies. Where a single use-report included more than one plant part, preparation method, administration form, or application method, these were retained as multiple comma-separated values within the corresponding field rather than divided into separate records. Raw data extraction was performed manually by three of the authors.

For taxonomic standardization, the scientific names reported in the original publications were retained verbatim to preserve source provenance. Accepted names and synonymy were resolved primarily using Plants of the World Online (POWO 2026); where a taxon could not be adequately resolved in POWO, World Flora Online (WFO 2026) was consulted as a secondary taxonomic source. Nomenclatural authorship was verified through the International Plant Names Index (IPNI 2026). Family assignments for angiosperms followed the APG IV system (APG IV 2016), whereas non-angiosperm taxa were classified according to the family placements adopted by POWO and WFO.

Therapeutic-use terminology reported in the source publications was retained verbatim to preserve source provenance, while semantically equivalent or closely related expressions were harmonized under a controlled set of standardized indications. The controlled vocabulary was developed iteratively during the harmonization process, resulting in the consolidation of 697 distinct reported-use terms, spanning both medicinal and ethnoveterinary records, into 226 standardized indications. For example, terms such as "Carminative," "Bloating," and "Abdominal distension" were grouped under the standardized indication "Flatulence." For medicinal (human-use) records, standardized indications were subsequently mapped to the International Classification of Diseases, 11th Revision (ICD-11) (World Health Organization [WHO] 2022) to support consistent medical classification and facilitate comparison with other biomedical

datasets. Reported uses that did not correspond to a specific disease state, including “tonic,” “diuretic,” “aphrodisiac,” and general protective or preventive uses, were assigned to the most appropriate functional, symptom-based, or other applicable ICD-11 category rather than being forced into a disease-specific classification. Where applicable, such uses were classified within symptom- or function-oriented categories, including the Level 1 chapter “Symptoms, signs or clinical findings, not elsewhere classified.” Every medicinal record received an ICD-11 classification at least at Level 1, and no medicinal use-report remained unmapped. Ethnoveterinary (animal-directed) records were not mapped to the human ICD-11 hierarchy; instead, they were assigned to a separate, flat set of descriptive “Animal diseases” categories maintained independently of ICD-11 and documented in the data dictionary.

Terminology harmonization was performed independently by three authors, each of whom evaluated the complete set of reported-use terms. Differences in standardized-indication assignments were resolved through discussion and consensus. When the meaning of a reported term was unclear, the original publication was revisited before a final assignment was made. ICD-11 mapping was subsequently undertaken by the same three authors using the same consensus-based approach. The complete mapping from reported use to standardized indication to ICD-11 classification is provided in Supplementary Material S2, enabling individual harmonization and classification decisions to be traced and independently reviewed.

Finally, preparation methods, administration forms, and application methods were classified with reference to Cook’s Economic Botany Data Collection Standard (Cook 1995). The terminology was adapted where necessary to accommodate distinctions encountered in the Turkish ethnobotanical literature. For example, “fresh consumption” and “expressed juice” were treated as distinct preparation categories when the information reported in the original source allowed this distinction to be made. These adaptations were intended to preserve relevant differences in traditional preparation and use practices while maintaining a consistent terminology across the dataset.

Dataset Structure

Each record in the TEMDB dataset constitutes a single use-report described by 24 standardized fields: (1) a unique record identifier; (2) use type (medicinal or veterinary); (3) publication year (study_year); (4) plant family (APG IV for angiosperms; POWO/WFO for non-angiosperms); (5) genus; (6) accepted species name (POWO/WFO); (7) full accepted taxon with authorship (verified against IPNI); (8) original plant name as reported in the source; (9) local (vernacular) name; (10) plant part(s) used; (11) preparation method; (12) administration form; (13) application method; (14–16) ICD-11 classification at Levels 1, 2, and 3, corresponding respectively to the ICD-11 chapter, block, and category levels of the classification hierarchy; (17) standardized indication; (18) reported use (verbatim); (19) geographic region; (20) province; (21) district; (22) village; (23) source reference; and (24) DOI or URL (doi_or_url). Preparation, administration, application, and plant-part fields may contain multiple comma-separated values when a single use-report includes more than one category. ICD-11 fields contain a single classification value per record; commas occurring within official ICD-11 category names (e.g.,

“Endocrine, nutritional or metabolic diseases”) are part of the WHO terminology and do not function as field delimiters. The accompanying data dictionary specifies the delimiter convention used for multi-value fields (a comma followed by a single space) and confirms that controlled-vocabulary terms do not contain internal commas.

The structure and standardization framework of TEMDB is illustrated in Fig. 1 using a representative record. In the source publication, the plant was reported as *Rosmarinus officinalis* L., whereas taxonomic standardization resolved the record to the accepted species *Salvia rosmarinus* Spenn., while retaining the originally reported name for traceability. Therapeutic-use information follows a parallel provenance-preserving structure: the reported use “Cold” is retained verbatim and harmonized under the standardized indication “Common cold” which is subsequently linked to the corresponding ICD-11 hierarchy. Additional fields preserve information on plant part, preparation and administration, geographic origin, and bibliographic source. This layered structure maintains traceability to the original ethnobotanical reports while providing standardized taxonomic and therapeutic-use fields for searching, comparison, and downstream analysis.

Data Availability and Licensing

The TEMDB v1.0 dataset and its companion data dictionary are deposited on Zenodo (DOI: 10.5281/zenodo.20002971). The dataset is distributed under a Creative Commons Attribution 4.0 International (CC BY 4.0) license, while access to the complete structured dataset is granted upon reasonable request through Zenodo, with data provided under this procedure remaining subject to the same CC BY 4.0 license. Individual records are freely searchable and viewable without registration through the TEMDB web portal (<https://turkish-ethnomedicinal-database-temdb.github.io/temdb.github.io/>), which provides standardized taxonomic, therapeutic-use, geographic, and bibliographic information at the record level. Geographic information was retained only at the level reported in the original publications; no additional locality information was inferred during database curation. To avoid facilitating unrestricted automated bulk extraction of geographically detailed traditional-knowledge records, the web interface does not provide a bulk-export function. This access model retains open record-level access while applying controlled access to the complete structured dataset and is compatible with the FAIR principle that data-retrieval protocols may incorporate authorization where necessary.

FAIR Alignment

TEMDB was designed in alignment with the FAIR data principles (Wilkinson et al. 2016). Findability is supported by deposition in Zenodo with a persistent DOI and descriptive metadata. Accessibility follows the tiered access model described above, which remains consistent with the FAIR principle that data-access protocols may incorporate authorization where necessary. Interoperability is supported by the use of internationally recognized taxonomic and medical reference systems, including POWO, WFO, IPNI, and ICD-11, together with standardized descriptors for preparation and administration based on Cook

(1995). However, semantic interoperability remains limited by the absence of persistent taxonomic and ontology identifiers and by the use of comma-separated values in multi-value fields. Reusability is supported by the open license, standardized data structure, documentation, and accompanying data dictionary. Future versions may improve interoperability by incorporating persistent, machine-resolvable identifiers, including taxon identifiers from POWO/WFO and ICD-11 foundation or entity identifiers for standardized indications, enabling more direct linkage with external biodiversity and biomedical resources.

Ethical Considerations

This study was based exclusively on previously published information and involved no new fieldwork, interviews, collection of biological material, or direct interaction with human participants. Accordingly, no new ethics approval or Free Prior Informed Consent (FPIC) process was undertaken for the present secondary-data compilation. TEMDB records structured plant–use associations extracted from the source publications rather than reproducing substantial portions of their original text. The CC BY 4.0 license applies to the TEMDB compilation and its Zenodo deposit and does not extend to the source publications, which remain subject to their respective copyright and licensing conditions.

The authors acknowledge that the traditional knowledge represented in TEMDB originates from the communities and knowledge holders documented in the original ethnobotanical studies. The compilation and dissemination of these data were therefore considered in relation to broader principles for the responsible stewardship of traditional knowledge, including the International Society of Ethnobiology Code of Ethics (ISE 2006) and the CARE Principles for Indigenous Data Governance (Carroll et al. 2020). As TEMDB is a secondary compilation of previously published information, no direct engagement with the original knowledge holders was undertaken as part of the present study.

Results

Dataset Metrics

The TEMDB (v1.0) dataset contains a total of 4,384 individual use-reports derived from 37 ethnobotanical studies, of which 4,221 (96.3%) document medicinal (human) uses and 163 (3.7%) document ethnoveterinary (animal-directed) uses, the latter retained as a clearly labeled subset. The taxonomic coverage includes 826 accepted species belonging to 98 families and 361 genera (Table 1). The distribution of the 37 source studies by publication year is shown in Table 2.

Table 1
Summary metrics of the TEMDB v1.0 dataset.

Parameter	Value
Total use-reports	4,384
Medicinal / Ethnoveterinary use-reports	4,221 / 163
Source studies	37
Accepted species	826
Plant families	98
Plant genera	361
Temporal coverage	2018–2020
Taxonomic standard	POWO, WFO, IPNI
Disease classification	ICD-11
Preparation standard	Based on Cook's Economic Botany Data Collection Standard
FAIR alignment	Designed in alignment with FAIR principles
Repository	Zenodo
Dataset DOI	https://doi.org/10.5281/zenodo.20002971

Table 2
Year-wise distribution of the 37 ethnobotanical studies underlying the TEMDB v1.0 dataset.

Year	Ethnobotanical studies
2018 (n = 16)	(Akan et al. 2018; Akgul et al. 2018; Akgül 2018; Albayrak and Daşkın 2018; Arı et al. 2018; Aslan 2018; Aydın and Yeşil 2018; Dalar et al. 2018; Dalar 2018; Güneş 2018a; Güneş 2018b; Güzel and Güzelşemme 2018; Mart and Türkmen 2018; Nacakcı and Dutkuner 2018; Raimov and Fakir 2018; Sinmez et al. 2018)
2019 (n = 14)	(Akbulut et al. 2019; Aladı et al. 2019; Badem et al. 2019; Bulut et al. 2019; Ergül Bozkurt et al. 2019; Gürbüz et al. 2019; Karakaya et al. 2019; Karaköse et al. 2019; Kerar and Akan 2019; Nadiroğlu et al. 2019; Özer and Türkmen 2019; Polat 2019; Sargin and Büyükcengiz 2019; Şahin Fidan and Akan 2019)
2020 (n = 7)	(Çelik and Yeşil 2020; Demir 2020; Erşen Bak and Çıfci 2020; Karakaya et al. 2020; Kaya et al. 2020; Kılıç et al. 2020; Küçük and Poyraz 2020)

Descriptive Dataset Profile

To provide a more detailed overview of the taxonomic, therapeutic, and geographic composition of TEMDB v1.0, the distribution of use-reports was examined across the principal dataset dimensions. At the family level, Lamiaceae was the most frequently represented family with 639 use-reports, followed by

Rosaceae (n = 494) and Asteraceae (n = 475) (Fig. 2). Together, the ten most frequently represented families accounted for 2,625 use-reports (59.9% of the full dataset), indicating that a substantial proportion of the records was concentrated within a relatively small number of plant families. At the species level, *Urtica dioica* L. was the most frequently represented taxon (n = 132), followed by *Plantago major* L. (n = 82), *Rosa canina* L. (n = 79), and *Malva neglecta* Wallr. (n = 77) (Fig. 3). The ten leading species together accounted for 646 use-reports (14.7%), suggesting considerably greater dispersion at the species level than at the family level.

The therapeutic profile was evaluated for medicinal (human-use) records only (n = 4,221). At ICD-11 Level 1, “Symptoms, signs or clinical findings, not elsewhere classified” was the largest category, comprising 1,337 use-reports (31.7%), followed by “Diseases of the digestive system” (n = 462) and “Diseases of the respiratory system” (n = 425) (Fig. 4). Categories represented by fewer than 90 use-reports were grouped as “Other categories” for visualization. At the level of standardized indications, the complete dataset was considered (n = 4,384), as the 226-term controlled vocabulary includes both medicinal and ethnoveterinary records. Diabetes was the most frequently represented use (n = 284), followed by wound healing (n = 228), cough (n = 207), and common cold (n = 206) (Fig. 5). The ten most frequent standardized indications accounted for 1,582 use-reports, representing 36.1% of the full dataset.

Geographic representation also varied substantially among the source studies. Düzce contributed the largest number of use-reports (n = 550), followed by Erzurum (n = 487) and Bingöl (n = 434) (Fig. 6). The ten most represented provinces together accounted for 3,132 records (71.4% of the dataset). These values reflect the geographic distribution and sampling intensity of the studies included in TEMDB v1.0 and should not be interpreted as measures of the prevalence of medicinal plant use or the ethnobotanical richness of individual provinces.

Discussion

The development of TEMDB addresses an important gap in the current accessibility and standardization of ethnobotanical data from Türkiye. In contrast to conventional narrative or tabular compilations, TEMDB provides a structured, machine-readable resource designed for record-level retrieval, comparison, and reuse. This approach is consistent with the growing use of digital ethnobotanical databases to organize dispersed traditional-knowledge records for comparative analysis, visualization, and hypothesis generation. The Brazilian Ewé database, for example, demonstrated the utility of an open-source, web-based platform for storing and analyzing standardized ethnobotanical use-reports (Souza and Hawkins 2020). Other initiatives include the international ethnobotany database framework proposed by Skoczen and Bussmann (2006), the Rizoma database of traditional plant uses in Chile (Cordero et al. 2022), and the ethnopharmacological database developed for northern Morocco (Redouan et al. 2025). TEMDB extends this line of work to Türkiye by combining record-level ethnomedicinal data with standardized therapeutic terminology, ICD-11 classification, and contemporary taxonomic verification.

The descriptive profile of TEMDB v1.0 also highlights several patterns within the literature represented in the current release. Lamiaceae was the most frequently represented family (n = 639), followed by Rosaceae (n = 494) and Asteraceae (n = 475), while *Urtica dioica* was the most frequently represented species (n = 132), followed by *Plantago major* (n = 82) and *Rosa canina* (n = 79). At the therapeutic level, “Symptoms, signs or clinical findings, not elsewhere classified” constituted the largest ICD-11 Level 1 category, and diabetes, wound healing, cough, and common cold were among the most frequent standardized indications. Geographic representation was likewise uneven, with Düzce, Erzurum, and Bingöl contributing the largest numbers of use-reports. These patterns should be interpreted as characteristics of the literature included in TEMDB v1.0 rather than as direct measures of the national prevalence, cultural importance, or therapeutic significance of particular taxa, indications, or regions. Differences in record frequency may reflect, among other factors, the number, location, and scope of the underlying source studies.

Linking reported ethnomedicinal terminology to ICD-11 represents one of the principal standardization components of TEMDB. This mapping facilitates structured comparison with biomedical datasets while retaining the original reported-use terminology for provenance. Importantly, an ICD-11 assignment in TEMDB should be interpreted as a standardized indexing category rather than as evidence that a traditional use is clinically equivalent to a biomedical diagnosis or validated therapeutic indication. Previous ethnobotanical datasets have also standardized therapeutic-use information using different classification systems. Monari et al. (2022), for example, grouped medicinal plant uses into nine major pathological categories. The use of ICD-11 in TEMDB provides a more granular and internationally recognized framework that may facilitate interoperability with other biomedical resources. Taxonomic standardization serves a similar purpose: accepted names and synonymy were resolved primarily using POWO, with WFO consulted as a secondary source, and nomenclatural authorship verified through IPNI. This approach improves taxonomic consistency across records that may have been published under synonyms or outdated names, while preserving the originally reported scientific names for traceability.

Several limitations should be considered when interpreting TEMDB v1.0. The exclusion of graduate theses and dissertations represents a deliberate but limiting methodological trade-off. Such sources constitute an important component of primary ethnobotanical fieldwork in Türkiye, and their exclusion reduces both the volume and geographic representativeness of v1.0, irrespective of the quality of any individual thesis. Peer-reviewed journal articles were prioritized to maintain a consistent and bibliographically traceable source base, rather than on the assumption that peer review necessarily indicates greater methodological quality. This exclusion should therefore be regarded as a pragmatic scope decision rather than a quality judgment, and future versions may consider the selective inclusion of relevant thesis data.

The current version of TEMDB is limited to publications from 2018 to 2020 and is therefore not intended as a comprehensive historical archive of Turkish ethnobotany. In addition, the dataset reflects the reporting quality of the original studies; ambiguities that could not be resolved during curation were documented in the data dictionary to maintain transparency. As a secondary compilation, TEMDB did not

independently verify the voucher-specimen status of plant identifications reported in the 37 source studies. Taxonomic standardization was therefore limited to resolving the reported names against POWO, WFO, and IPNI and does not constitute re-identification of the original plant material. The underlying source studies are also geographically uneven, with particularly high representation from several provinces in eastern Türkiye and the Black Sea region (Fig. 6). This imbalance should be considered in cross-regional comparisons, as apparent geographic differences may partly reflect variation in sampling density rather than genuine differences in traditional plant use.

Conclusion

TEMDB provides a standardized, record-level framework for organizing published ethnomedicinal data from Türkiye and is designed as an evolving resource. Data curation for adjacent publication periods is ongoing, and future releases will progressively extend the temporal coverage of the database toward a broader, multi-decade archive of Turkish ethnobotany. Future versions may also explore interoperability with emerging traditional-medicine terminologies where culturally and conceptually appropriate.

TEMDB v1.0 is openly accessible at the individual-record level, while bulk dataset access is granted upon reasonable request. Future temporal extensions and curatorial corrections will be released as new Zenodo deposits, each assigned its own version-specific DOI and linked to the current release (10.5281/zenodo.20002971) through the shared concept DOI (10.5281/zenodo.20002970), and community-reported corrections will be considered for incorporation into subsequent releases.

Declarations

Conflict of Interest

The authors have no relevant financial or non-financial interests to disclose.

Author Contribution

H.O.T. and M.E. conceptualized and designed the study, developed the methodology, curated and standardized the data, analyzed the dataset, and drafted the manuscript. F.B.K. contributed to data collection, curation, and standardization and reviewed the manuscript. E.A. supervised the study and critically reviewed the manuscript. All authors read and approved the final version of the manuscript.

Acknowledgement

The authors acknowledge the researchers whose ethnobotanical publications contributed to the development of this curated dataset, and Hatice İklima Bozkurt for her contributions to the preliminary data collection process.

Data Availability

The TEMDB v1.0 dataset and its companion data dictionary are deposited on Zenodo (<https://doi.org/10.5281/zenodo.20002971>) under a Creative Commons Attribution 4.0 International (CC BY 4.0) license. Individual records are freely searchable and viewable without registration through the TEMDB web portal (<https://turkish-ethnomedicinal-database-temdb.github.io/temdb.github.io/>). Access to the complete structured dataset is granted upon reasonable request through Zenodo, with data provided under this procedure remaining subject to the same CC BY 4.0 license; the web interface does not provide a bulk-export function in order to avoid unrestricted automated extraction of geographically detailed traditional-knowledge records.

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Figures

Salvia rosmarinus

Salvia · Lamiaceae · 2019

INDICATION MAPPING

Cold → Common cold → 12 - Diseases of the respiratory system

TAXONOMIC IDENTITY

Accepted species	<i>Salvia rosmarinus</i>
Accepted taxon	<i>Salvia rosmarinus</i> Spenn.
Plant name in source	<i>Rosmarinus officinalis</i> L.
Local name	Biberiye

USE DETAILS

Use category	Medicinal
Reported use	Cold
Standardized indication	Common cold
Plant part used	Folium
Preparation technique	Infusion
Form of use	Tea
Route / application	Internal

BIOMEDICAL CLASSIFICATION

ICD-11 Level 1	12 - Diseases of the respiratory system
ICD-11 Level 2	Upper respiratory tract disorders
ICD-11 Level 3	Acute nasopharyngitis

GEOGRAPHIC CONTEXT

Region	Aegean Region
Province	Denizli
District	Not reported
Village	Not reported

SOURCE AND PROVENANCE

Akbulut, S., Karaköse, M., & Özkan, Z. C. (2019). Traditional uses of some wild plants in Kale and Acıpayam provinces in Denizli. *Kastamonu Üniversitesi Orman Fakültesi Dergisi*, 19(1), 72-81.
DOI: 10.17475/kastorman.543529

Record ID: 2019_0099

Figure 1

Example TEMDB record (ID: 2019_0099) showing taxonomic and therapeutic-use standardization, ICD-11 classification, and source provenance.

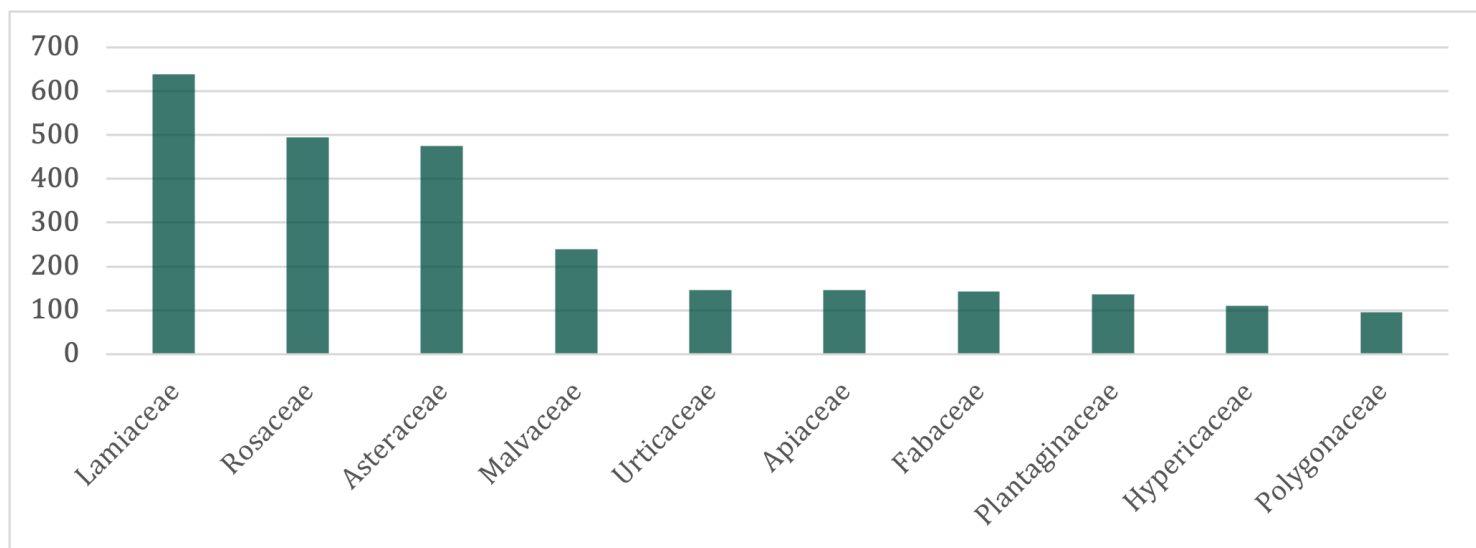


Figure 2

Ten most frequently represented plant families in the TEMDB v1.0 dataset based on the number of use-reports (n = 4,384).

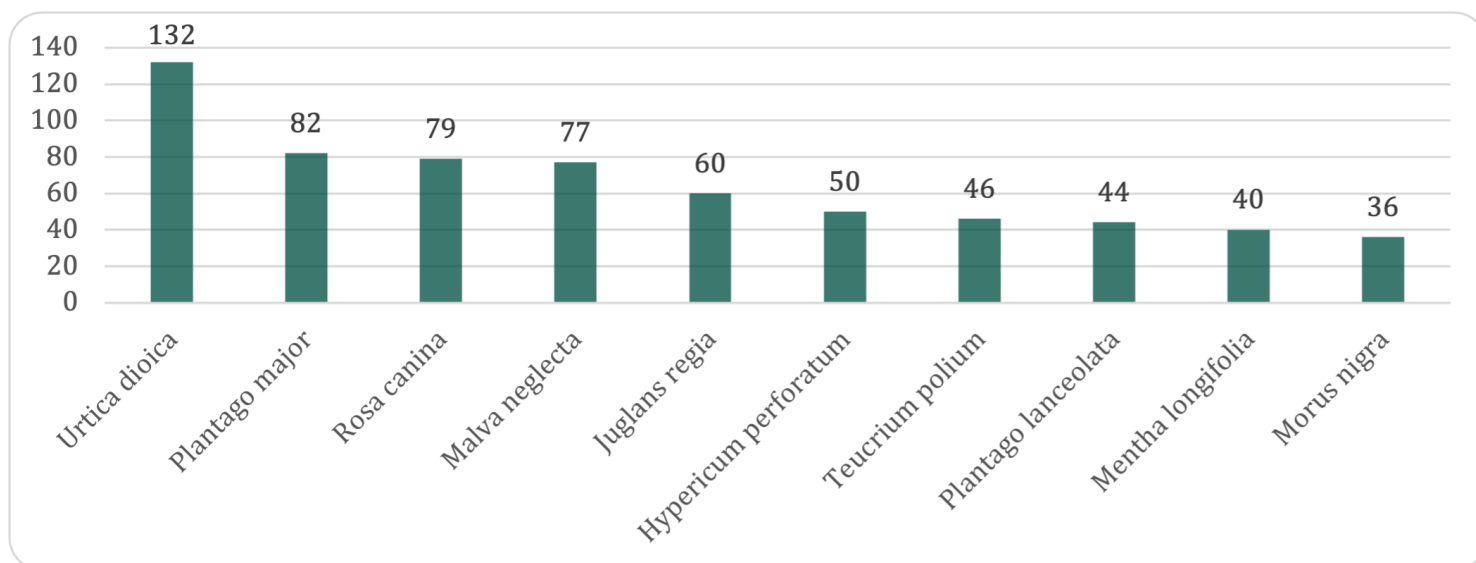


Figure 3

Ten most frequently represented plant species in the TEMDB v1.0 dataset based on the number of use-reports (n = 4,384).

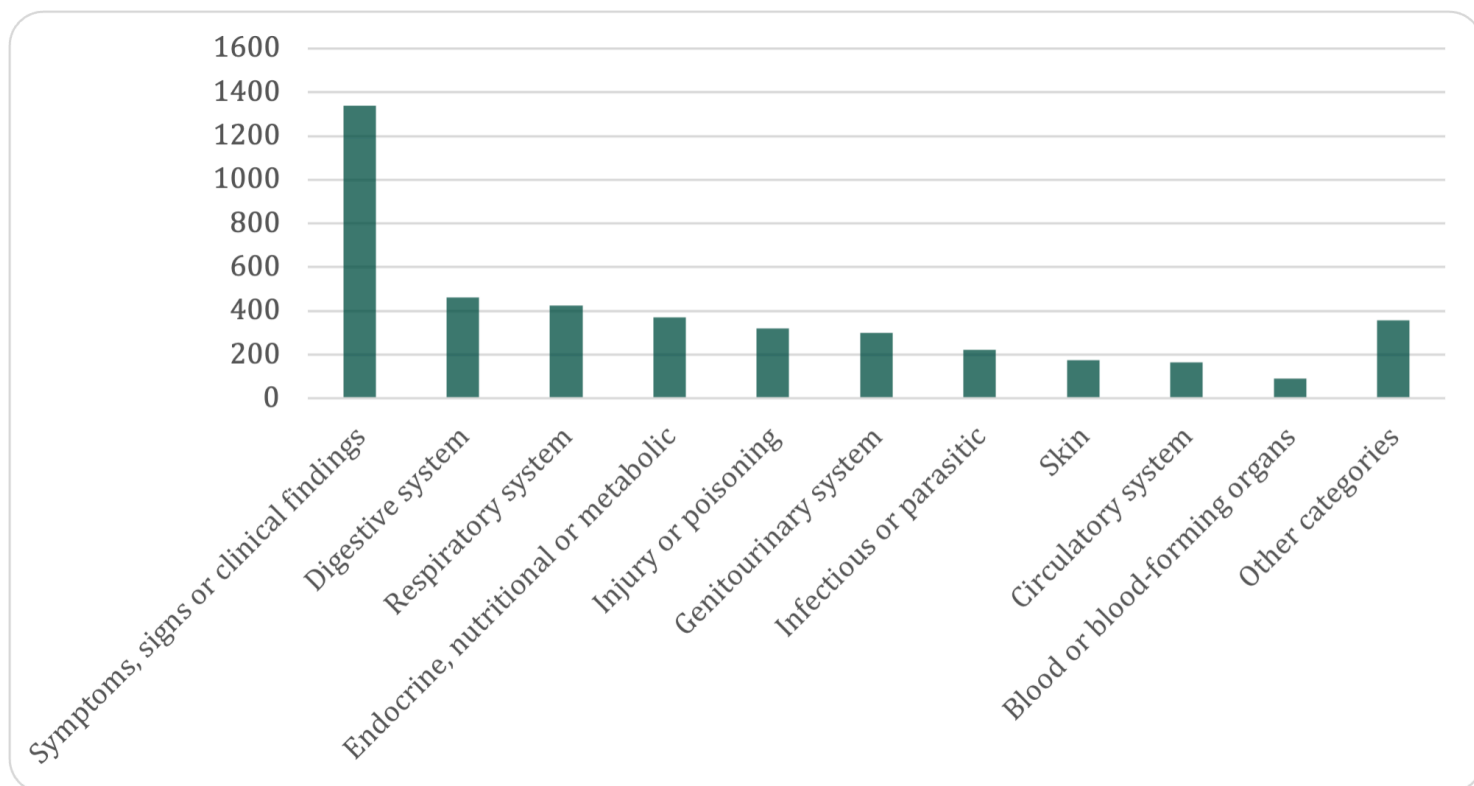


Figure 4

Distribution of medicinal (human-use) use-reports across International Classification of Diseases, 11th Revision (ICD-11) Level 1 categories (n = 4,221). Ethnoveterinary records, classified separately under “Animal diseases,” were excluded. Categories with fewer than 90 use-reports were grouped as “Other categories.”

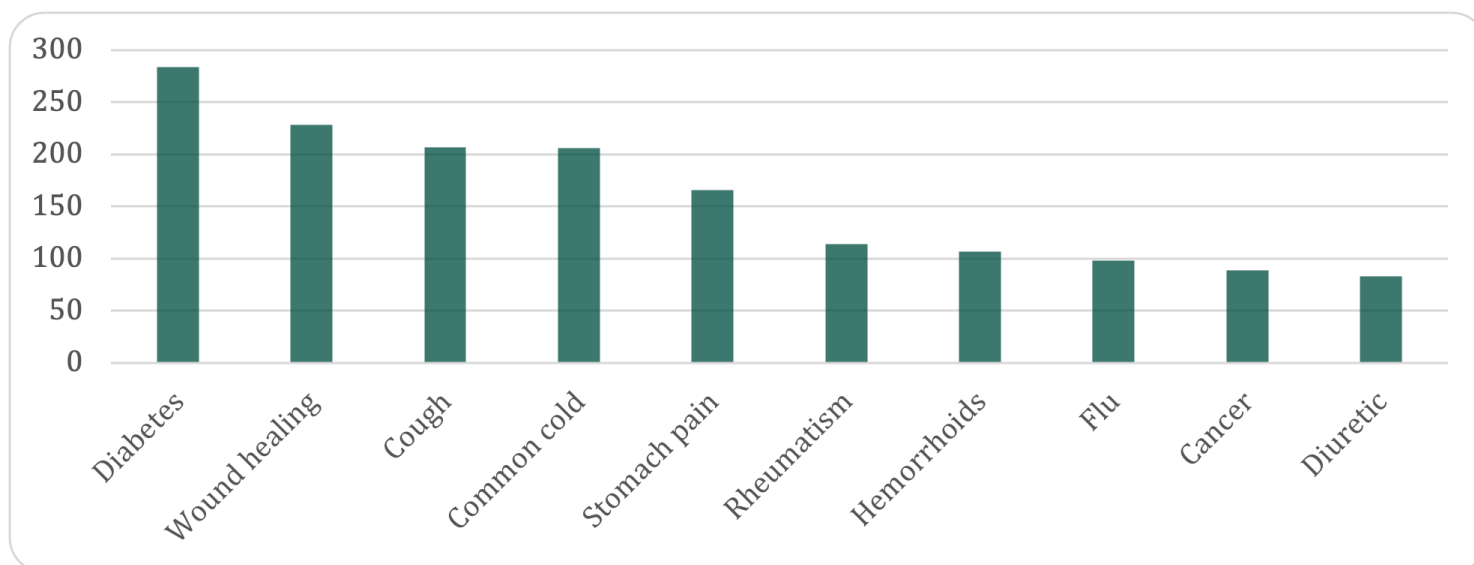


Figure 5

Ten most frequently represented standardized indications in the TEMDB v1.0 dataset based on the number of use-reports (n = 4,384).

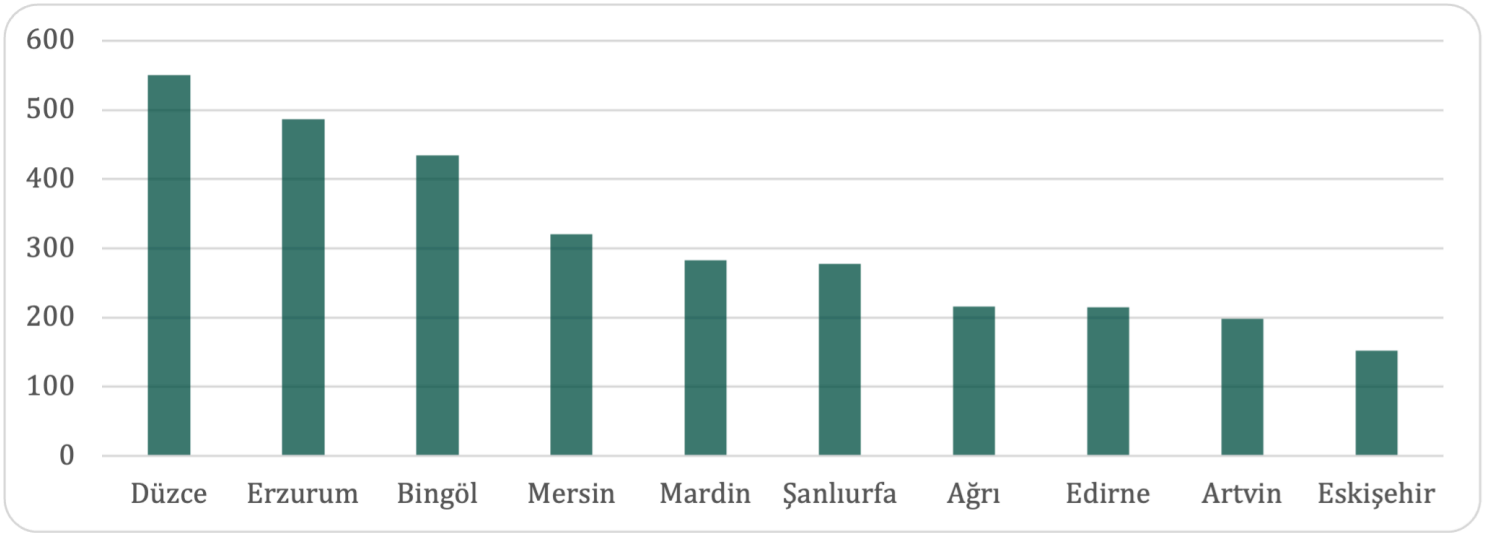


Figure 6

Ten most frequently represented provinces in the TEMDB v1.0 dataset based on the number of use-reports (n = 4,384).

Supplementary Files

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- [SupplementaryMaterialS2..xlsx](#)
- [SupplementaryMaterialS1..docx](#)