Neem

Figure 1: https://food.ndtv.com/health/benefits-and-uses-of-neem-a-herb-that-heals-1231051

Scientific Name: *Azadirachta Indica*

Major Properties

Important component in herbal medicine, Neem is used against pests and fungal medicines. Also used as a contraceptive, fuel, in toiletries, as timber and in agriculture as a cure for ailing soil, plants and livestock. [1]

Traditional Knowledge Origin

Neem is subjected to widespread use in India for around 200 years and one can find reference to this plant even in ancient *sanskrit* texts. [2]

Patent Protection

As Neem exhibits numerous beneficial and medicinal qualities, it has been subjected to rampant patent protection and commercialization in countries including USA, Japan, EU, Australia, among others.[3]The first US patent was obtained by Terumo Corporation in 1983 for its therapeutic preparation from neem bark. The patent was later sold to W.R. Grace and Co (presently Certis). The largest number of patents are held in the USA followed by Japan and Australia.[4]

Patent Revocation

Post widespread opposition from several corners of India, several patents on neem have been disputed. One such patent was revoked by European Patent Office (EPO)

[1] http://www.twn.my/title/pir-ch.htm

[2] Ibid.
[3] https://www.neemfoundation.org/about-neem/patent-on-neem/
[4] Ibid.

in 1999. However, several others are still enjoying patent protection in many parts of the world. [5]

Foreign Value from Commercialization

No consolidated details found

Benefit sharing

No details found.

[5] https://www.downtoearth.org.in/news/karnataka-farmers-want-target-cargill-again-31378; see also: http://ipindiaservices.gov.in/PublicSearch/PublicationSearch/PatentSearchResult

Turmeric

Figure 2: https://www.webmd.com/diet/ss/slideshow-turmeric

Scientific Name: *Curcuma longa*

Major Properties

Turmeric is a spice subjected to extensive use in India from centuries. It is used for adding flavour and colour to food and enjoys widespread popularity for its medicinal and healing properties. [6]

Traditional Knowledge Origin

India.

Patent Protection

In 1995, the United States Patent and Trademark Office (USPTO) granted a patent (US Patent No 5,401,504) for the use of powdered turmeric for healing wounds. The said patent was assigned to two researchers affiliated to Mississippi Medical Centre in 1995.[7]

Patent Revocation

The patent was challenged by the Council for Scientific and Industrial Research (CSIR) of India in 1996. CSIR presented strong evidence challenging the said patent on the grounds of novelty. The evidence included references from *sanskrit* references, Urdu and Hindi references and even a paper published in 1953 by Indian Medical Association. In 1997, this patent was revoked by USPTO. [8]

The Turmeric patent battle received widespread attention all over the world. It was seen as a significant development in the

[6] David R. Downes, How Intellectual Property Could Be a Tool to Protect Traditional Knowledge, 25 Colum. J. Envtl. L. 253 (2000)

[7] Sanjay Kumar, India wins Battle with USA over Turmeric Patent, 350 LANCET 724 (1997)

[8] Ibid.

field of protection of traditional knowledge. Post this, India also established Traditional Knowledge Digital Library (TKDL) as a tool to strengthen the electronic documentation of the Traditional Knowledge. Presently, TKDL contains 2.97 lakh formulations from the texts of traditional medicine systems of India including Ayurveda, Unani, Siddha and Yoga. TKDL is a chief resource constituting the details of TK and acts as a bridge between the local language texts (prior art) and international patent examiners. TKDL plays a major role in countering misappropriation of traditional Knowledge.[9]

Foreign Value from Commercialization

No consolidated details found

Benefit sharing

No details found.

[9] http://www.tkdl.res.in/tkdl/langdefault/common/Abouttkdl.asp?GL=Eng

Ayahuasca

Figure 3:
http://www.ayahuascatoday.com/ayahuasca-science/ayahuasca-studies-scientific-analysis/

Scientific Name: *Banisteriopsis caapi and Psychotria viridis*

Major Properties

Ayahuasca, also known as Yage, is a blend of two plants namely ayahuasca vine and chacruna shrub and is consumed as a ceremonial drink within several South American tribes. The South American tribes and indigenous societies identify Ayahuasca as an integral part of their culture and society. Peru's Govt. has recognised the status of Ayahuasca as -'One of the basic pillars of identity of Amazon people'.[10] Ayahuasca is known to have a positive effect in treating Post Traumatic Stress Disorder (PTSD), depression and also used in religious ceremonies.

Traditional Knowledge Origin

Amazon basin, Peru, Colombia, Brazil and Ecuador. The Ayahuasca is known from different names- *natema, hoasca, daime. Yage*.[11]

Patent Protection

In 1986, the United States granted a patent on a variety of *Banisteriopsis caapi* which was called 'Da Vine'to Mr Loren Miller.[12]

Patent Revocation

In 1999, the Centre for International Environmental Law challenged the said patent. Though, initially revoked by USPTO on the grounds of lack of novelty; the patent was reinstated in 2001 on the basis of new

[10] https://www.bbc.com/news/magazine-27203322
[11] https://www.ncbi.nlm.nih.gov/pmc/articles/PMC4773875/
[12] http://www.tkdl.res.in/tkdl/langdefault/common/Biopiracy.asp?GL=Eng

evidence. The patent was allowed to stand for the last two years of its tenure. The said patent expired in 2001.[13]

Foreign Value from Commercialization

No consolidated details found. However, there are numerous reports on mass commercialization of Ayahuasca in international media. Ayahuasca tourism is prevalent in Colombia and Peru.[14]

Benefit sharing

No details found.

[13] https://www.ciel.org/project-update/protecting-traditional-knowledge-ayahuasca/
[14] Supra note 9.

Peruvian Maca

Figure 4: https://sites.duke.edu/amazonbiopiracy/files/2013/12/maca

Scientific Name: *Lepidium meyenii*

Major Properties

Peruvian Maca is an herbaceous, perennial root vegetable found only in the Andean Central Sierra of Peru in Puna agro ecological area.[15]. Peruvian Maca is known for medicinal and nutritional properties. It has been found extremely beneficial in treating sexual dysfunction.[16]

Traditional Knowledge Origin

Peru.[17]

Patent Protection

Peruvian Maca is subjected to widespread patent protection in the USA, EU and Japan. Few of these are - US Patent 6,267,995 (Extract of *Lepidium meyenii* roots for pharmaceutical applications granted to Pure World Botanicals Inc.), US Patent 6,428,824 (Treatment of sexual dysfunction with an extract of *Lepidium meyenii* roots granted to Pure World Botanicals, Inc.) and Patent No 6,552,206 Compositions and methods for their preparation from *Lepidium*).[18]

Patent Revocation

No details of patent revocation found. Peru, however has identified Maca as one of 32 Peru botanicals prioritized for protection

[15] http://cms.herbalgram.org/herbalgram/issue75/article3128.html?ts=1578636010&signature=413b10852c3c771c41557903b5a10edd

[16] https://www.ncbi.nlm.nih.gov/pmc/articles/PMC4614013/
[17] Supra note 15.
[18] Ibid.

against biopiracy. As a part of this, in 2004, Peruvian congress passed a law 28216- The Law Protecting Access to Peruvian Biological Diversity and the Collective Knowledge of Indigenous Peoples and established the National Commission for the Protection of Access to Biological Diversity and collective knowledge of indigenous people. Peruvian National Institute for the Defence of Competition and Protection of Intellectual Property, INDECOPI has formulated a working group tasked with investigation of Maca patents granted in different jurisdiction.[19]

Foreign Value from Commercialization

No consolidated details found. However, there are numerous reports on mass commercialization within international media and academic work. [20]

Benefit sharing

No details found.

[19] Supra note 15.

[20] Fabiola Tavui, 'Distorting the life of Maca (Lepidium meyenii)'(2016). Master's Theses. 204. Available at: https://repository.usfca.edu/cgi/viewcontent.cgi?article=1259&context=thes;
See also: https://www.bioversityinternational.org/fileadmin/_migrated/uploads/tx_news/The_transition_of_maca_from_neglect_to_market_prominence__nbsp_lessons_for_improving_use_strategies_and_market_chains_of_minor_crops_1318.pdf;
See also: http://cms.herbalgram.org/herbalgram/issue75/article3128.html?ts=1584530147&signature=c12e0a120e53e30637cde5bdee5b49d4

Stevia

Figure 5:

https://en.wikipedia.org/wiki/Stevia_rebaudiana

Scientific Name: *Steviol Rebaudiana*

Major Properties

Stevia, also known as, Kaá he'é by indigenous Guaraní people of Paraguay and Brazil, is a miraculous plant known for its sweetening properties. The said plant along with the leading sweetening constituent- steviol glycoside (derived from stevia though industry intensive process) are taking multinational industries by storm. Many industries are adopting stevia or industrially produced steviol glycoside to develop natural and sugar-free products.[21]

Traditional Knowledge Origin

The Guaraní people in Paraguay and Brazil are well aware of the sweetening properties of Stevia for centuries.[22]

Patent Protection

Both Stevia and its derivative steviol glycoside has been subject to intense intellectual property protection. As per Public Eye report[23], the International Union for the Protection of New Varieties of Plants (UPOV) database exhibits some 40 worldwide applications concerning 'Stevia'. Apart from this, stevia and its industrially produced derivative has also been subjected to wide patent protection. The oldest patent application in this regard dates back to 1973 in the USA for a method of producing steviosides (US 3723410 A). With the increase in demand, patent activity is also intensifying in the USA and EU. However,

[21] Berne Declaration (now Public Eye) Pro Stecia, *et.al*, , 'The Bitter sweet taste of Stevia' (November, 2015) available at: https://www.publiceye.ch/fileadmin/doc/Biopiraterie/2015_PublicEye_Stevia_E_Report.pdf
[22] Ibid.
[23] Supra note 18.

none of the patents have been filed in Paraguay, home country of Stevia. On Patent protection, most of the patents are being filed with respect to the processes involved in the production of steviol glycoside by genetic modification or synthetic biology. Number of leading companies, Coca Cola, DSM, Evolva Sa, McNeil Nutritionals LLC, Suntory Holdings and Cargill hold these patents. Smaller companies from Japan, China, South Korea also form a share of patent applicants.

Patent Revocation

No details found.

Foreign Value from Commercialization

Several reports identify that several multinational companies around the world are misappropriating traditional knowledge and associated genetic resources to generate significant profit.[24] Coca-Cola, PepsiCo and other similar companies have used this sugar alternative – to build an estimated USD 492 million year industry.[25] The global stevia market is expected to reach USD 801.7 million by 2026.[26]

Benefit sharing

No details found.

[24] https://intercontinentalcry.org/stevia-derived-sweeteners-violate-indigenous-rights/
[25] https://www.atlasobscura.com/articles/where-is-stevia-from
[26] https://www.globenewswire.com/news-release/2019/04/25/1809954/0/en/Stevia-Market-To-Reach-USD-801-7-Million-By-2026-Reports-And-Data.html

Indian Spices for Tooth Decay

Figure 6: https://articles.mercola.com/herbs-spices/cloves.aspx

Description and Major Properties

Several common house-hold use spices in India namely, clove (*Syzygium Aromaticum*), black pepper (*Piper nigrum*), camphor (*Cinnamomum camphora*), cinnamon (*Cinnamomum verum*), spearmint (*Mentha spicata*) are traditionally used in India in toothpastes or as a treatment for tooth decay. This forms part of India's traditional knowledge and has been mentioned in Ayurvedic texts.

Traditional Knowledge Origin

Widely practiced in India.

Patent Protection

In 2008 and in 2010 Colgate Palmolive, a USA based company, filed two patents in the EU respectively. The prior patent was concerned with composition containing botanical extracts from three herbs, including cinnamon. The latter patent was oral composition containing nutmeg, ginger, "Bakul" tree, camphor, cinnamon, turmeric, Indian banyan, black pepper, long pepper, Neem and clove for treating oral cavity. [27]

[27] https://www.newyorker.com/tech/annals-of-technology/who-owns-the-patent-on-nutmeg

Patent Revocation

Both of these patents were successfully opposed by India on the ground of novelty as the existence of these traditional knowledge was heavily documented under Traditional Knowledge Digital Library (TKDL) an initiative undertaken by Council of Scientific and Industrial Research (CSIR).[28] However, there is still evidence that patent protection is accorded to oral care composition consisting of clove oil, cinnamon oil, oregano oil, peppermint oil, sesame oil and its combinations thereof.[29]

Foreign Value from Commercialization

No consolidated details found.

Benefit sharing

No details found.

[28] https://www.deccanherald.com/content/490282/india-blocks-colgate-patents-spices.html
[29] US Patent 20160030331A1.

Rosy Periwinkle

Figure 7:

http://powo.science.kew.org/taxon/urn:lsid:ipni.org:names:77880-1

Scientific Name : *Catharanthus roseus*

Major Properties

Rosy Periwinkle is known to be a source of two cancer-fighting drugs vincristine and vinblastine. The medical properties associated with Rosy Periwinkle were isolated, tested and marketed by Eli Lilly and used in the treatment of diseases like Hodgins diseases, childhood leukaemia, and malaria.[30]

Traditional Knowledge Origin

Rosy Periwinkle is native of Madagascar. The indigeneous people of Madagascar are known to be well aware of the medical properties of this plant from centuries. However, the origin of Rosy Periwinkle is disputed as it is now fairly cosmopolitan species now cultivated in six continents and deeply integrated in folk healing traditions in countries like England, Pakistan, Dominica and Vietnam.[31]

Patent Protection

The commercial activities and technological development as a cancer fighting drug from the said plant is attributed to Eli Lilly, an American pharmaceutical company. Eli Lilly started its commercial activities with respect to the said plant as early as the late

[30] John Reid, 'Biopiracy: The Struggle for Traditional Knowledge Rights' Vol 34 American Indian Legal Review 77-89 (2009-2010), available at: https://www.jstor.org/stable/25684263?seq=1#metadata_info_tab_contents

[31] https://web.williams.edu/AnthSoc/native/rosyperiwinkle.htm

1950s.[32] Eli Lilly commercialized vincristine under the trade name 'Oncovin'.

Patent Revocation

No information is available. Owing to the complexities involved in the case of Rosy Periwinkle regarding its origin and the research involved in extraction, isolation of vincristine and vinblastine, this is considered to be a weak case of biopiracy. The said case is seen as more of a case where it is extremely hard to disentangle proprietary claims originating from folk knowledge.[33]

Foreign Value from Commercialization

The global pharmaceutical companies have generated huge profit out of Oncovin. Their worldwide sales are worth over £ 75 million.[34] Post the development of vincristine and vinblastine, doctors have achieved a remission rate of 90 percent in cases of childhood lymphocytic leukaemia[35] No exact figures on total value of the product is available.

Benefit sharing

No details found.

[32] *See generally*, Darell A. Posey and Graham Dutfield, Beyond Intellectual Property, International Development Research Centre, Canada, 1996; Michael F. Brown, Who owns native culture, Harvard University Press, England, 2003 and Ikeji Mgbeoji, Global Biopiracy, Patents Plants and Indigenous Knowledge, UBC Press, Toronto, 2006
[33] Supra note 26.
[34] https://livingrainforest.org/learning-resources/rosy-periwinkle
[35] Ibid. .

Enola Bean (Yellow Bean)

Figure 8: http://www.new-ag.info/en/developments/devItem.php?a=964

Scientific Name: *Phaseolus vulgaris*

Description and Major Properties

Yellow Bean or Enola Bean is an important staple food and source of income in northwest Mexico.[36]

Traditional Knowledge Origin

These yellow beans have been grown in Mexico for centuries and developed by farmers.[37]

Patent Protection

In 1991, Mr. Larry Proctor, proprietor of Pod-ners L.L.C. brought a bag of dry beans from Mexico, and planted them in Montrose County, Colo. In 1996, Mr. proctor filed for an exclusive monopoly patent for inventing. 'Distinctly coloured yellow seed that remains relatively unchanged by season. In 1999, Mr. Proctor officially became patent holder (US Patent 5, 894,079) of yellow beans termed as 'Enola Bean' after his wife's middle name.[38]

Post winning the said patent, he exerted pressure through numerous lawsuits, threats and customs inspections on Mexican

[36] http://www.new-ag.info/en/developments/devItem.php?a=964
[37] https://www.nytimes.com/2001/03/20/science/patent-on-small-yellow-bean-provokes-cry-of-biopiracy.html
[38] Ibid.

farmers or exporters that exported yellow beans to the USA. He also sued seed companies and farmers selling or growing yellow beans in the USA.[39]

Patent Revocation

In December 2000, the International Centre for Tropical Agriculture challenged the said patent at the United States Patent and Trademark Office (USPTO). The patent was challenged on the grounds of novelty and inventive step. Over the course of 2003 and 2005, USPTO examinations rejected the patent and subsequent attempts by Proctor to have the patent amended and re-examined. On 29 April 2008, the USPTO Board of Patent Appeals affirmed the patent re-examiner's decisions regarding the rejection of all standing claims in the patent.[40] However this whole battle has caused severe hardship for Mexican farmers. The importers, during the sustenance of the patent, faced stiff competition as well as royalty demands from Proctor. Consequently, several bean farmers either shifted to other crops or confined their sales to regional market to avoid royalty demands from Proctor.[41]

Foreign Value from Commercialization

No consolidated details found.

Benefit sharing

No details found.

[39] https://www.twn.my/title2/intellectual_property/info.service/2009/twn.ipr.info.090801.htm

[40] USPTO Appeal 2007 – 3938

[41] Supra note 32. See also: Erin Donovon, 'Beans. Beans, the Patented Fruit: The Growing International Conflict over the Ownership of Life' *Loyola of Los Angeles International and Comparative Law Review* (2002). Available at: https://digitalcommons.lmu.edu/cgi/viewcontent.cgi?referer=&httpsredir=1&article=1538&context=ilr

Basmati

Figure 9: https://www.tarladalal.com/How-To-Cook-Basmati-Rice-for-Biryani-5299r

Description and Major Properties

Basmati is a long grain aromatic rice that has specific characteristics such as extra-long slender grains that elongate twice their original size and are widely known for their delicious taste and superior aroma. [42]

Traditional Knowledge Origin

Basmati or the long grain aromatic rice grown for many centuries in specific geographical regions at the Himalayan foothills of Indian subcontinent. The origin of these basmati varieties have also been documented in ancient religious texts (Atharvaveda c. 1500 B.C.).[43] Presently, 29 varieties of Basmati are notified under Indian Seeds Act 1966.[44] India is also leading exporter of Basmati rice to the global market.[45]

Patent Protection

In 1997, the United States Patent and Trademark Office granted a patent 5,663,484 on 'Basmati rice lines and grains' to the Texas-based company RiceTec Inc.

Patent Revocation

The said patent was contested by an Indian NGO namely, Agricultural and Processed Food Products Export Development Authority in India, with government

[42] http://apeda.gov.in/apedawebsite/SubHead_Products/Basmati_Rice.htm

[43] Daniel F. Robinson, Confronting Biopiracy Challenges, Cases and International Debates, Earthscan, Washington DC, 2010.
[44] Supra note 39.
[45] Ibid.

support.[46] Eventually some of the claims were withdrawn by RiceTec Inc. However, few others, those which were centred around specific novel rice lines were maintained by the company.[47]

Foreign Value from Commercialization

No consolidated details found.

Benefit sharing

No details found.

[46] S Ghosh, 'Globalization, Patents, and Traditional Knowledge' (2003-2004) 17(1) Columbia Journal of Asian Law 101
[47] Ibid.

Hoodia

Figure 10: https://www.purehoodia.com/

Scientific Name: *Hoodia gordonii*

Description and Major Properties

This plant is a source of food, medicine and water for *San* and *Khoe* indigenous people originating from parts of South Africa.[48] These indigenous groups traditionally consumed parts of the Hoodia plant when they were on a long hunting trip to the Kalahari desert in South Africa.[49]

Hoodia's chemical composition is used in obesity treatment.[50]

Traditional Knowledge Origin

As explained above, Hoodia is associated with San and Khoe indeginious people from South Africa.[51]

Patent Protection

Important insights about Hoodia from San indigenous group became the basis of research and development project taken up by South African Council for Scientific and Industrial Research (SACSIR) in 1963. In 1995, the organization filed for a patent (Patent number 983170) on use of the active components of the plant which were responsible for suppressing appetite. Post 1998, CSIR got engaged with several other international organizations such as Phytopharm for commercial arrangement and even filed for several other patents.[52]

[48] Lere Amusan, ' Politics of Biopiracy: An Adventure into Hoodia/ Xhoba patenting in South Africa', 14(1) African Journal of Traditional, Complementary and Alternative Medicine 103-109 (2017) https://www.ncbi.nlm.nih.gov/pmc/articles/PMC5411860/

[49] Bavikatte, K., Jonas, H. and von Braun, J. (2009) 'Shifting Sands of ABS Best Practice: Hoodia from the Community Perspective', UNU-IAS Traditional Knowledge Initiative: Guest Articles, 31 March, www.unutki.org/default.php?doc_id+137, available at Daniel F. Robinson, Confronting Biopiracy Challenges, Cases and International Debates, Earthscan, Washington DC, 2010

[50] Supra note 40.

[51] Ibid.

[52] Supra note 40

Patent Revocation

No details found

Foreign Value from Commercialization

CSIR along with Phytopharm was engaged in several commercial arrangements with Pfizer, Unilever among others.[53]

No consolidated details found.

Benefit sharing

Post a lot of pressure from NGOs and indigenous group including Working Group on Indigenous Minorities in Southern Africa (WIMSA), SACSIR negotiated a memorandum of understanding in 2001 and established 'San Hoodia Benefit-Sharing Trust' in 2003 to manage payments and royalties'.[54] The trust and CSIR also conduct knowledge sharing programmes. These entities are involved in sharing their expert knowledge and ability to identify and pinpoint properties of regional flora.[55]

[53] Deighton, B. (2008) 'Update 2-Unilever Abandons Phytopharm Weight-loss Product', Reuters, www.reuters.com, 14 November in Daniel F. Robinson, Confronting Biopiracy Challenges, Cases and International Debates, Earthscan, Washington DC, 2010

[54] Dutfield, G. (2004) Intellectual Property, Biogenetic Resources and Traditional Knowledge, Earthscan, London, available at Daniel F. Robinson, Confronting Biopiracy Challenges, Cases and International Debates, Earthscan, Washington DC, 2010

[55] WIPO: Leveraging Economic Growth through Benefit Sharing. Available at: https://www.wipo.int/ipadvantage/en/details.jsp?id=2594

Camu Camu Patents

Figure 12: https://www.verywellfit.com/camu-camu-health-benefits-uses-side-effects-89428

Scientific Name: *Myrciaria dubia*

Description and Major Properties

Camu Camu is a plant native to Amazonia. Although there has been no conclusive study over the origin of this plant, it is often linked to Peru as the world's largest population is found here. The plant is known to have the highest level of ascorbic acid (vitamin C) as compared to other natural sources such as lemon. The major potential use of camu camu is as a source of vitamin C, an antioxidant helpful in preventing cancer, heart disease and stress. It is also an important source of energy essential for producing collagen that helps in the formation of cartilage. It is also known to have positive effects on skin, immune and digestive system.[56]

Traditional Knowledge Origin

There is no conclusive study on the origin of camu camu. However, it is often linked to Peru as the world's largest population of this plant is found here.

Patent Protection

Peru has submitted a document titled Analysis of Potential Cases of Biopiracy in 2006.[57] The said document identifies several patents granted on Camu- Camu all over the world including EU and Japan.

Patent Revocation

No Information available.

[56] Intergovernmental Committee on Intellectual Property And Genetic Resources, Traditional Knowledge And Folklore Ninth Session Geneva, April 24 To 28, 2006, Document submitted by Peru WIPO/GRTKF/IC/9/10

[57] Ibid.

Foreign Value from Commercialization

No Information available.

Benefit sharing

No details found.

Traditional Knowledge: Examples of Biopiracy

Traditional Knowledge is broadly understood as the knowledge, know-how, skills and practices that are generated, sustained and passed on through generations within indigenous and tribal communities. The traditional knowledge occupies an extremely important place in the lives of the indigenous and local communities; is part of their spiritual and cultural identity and is essential for their livelihood. These indigenous, tribal or traditional communities often also innovate within the traditional knowledge framework. However, over the years, often due to lack of awareness on the part of indigenous and tribal communities this traditional knowledge has been misappropriated by third parties including, by some of the most powerful corporations around the world.

The issue primarily is that traditional knowledge or knowledge held, preserved and developed by traditional communities/indigenous people may form the basis of the invention sought to be patented. However, when this knowledge which is critical for the claimed invention is not required to be disclosed in the patent application, patents or proprietary rights could be granted to third parties on existing knowledge without the knowledge of the true owners and users. Centre for WTO Studies, Indian Institute of Foreign Trade aims to document instances of such piracy also called biopiracy on a sustained basis and founded on information from around the world.

The following is the first of a periodic series that we wish to run so as to document as many cases as possible. We would be grateful to receive any supplementary information about the documented traditional knowledge. We would also encourage our readers to contribute information about any additional information or new traditional knowledge that they may be aware of so that we could document it also.