



MYANMAR'S ROSEWOOD CRISIS

Why key species and forests must be protected through CITES

EXECUTIVE SUMMARY

Extremely rapid growth in Chinese imports of 'redwood', 'rosewoods' or 'Hongmu' timbers from Myanmar in the past two years is directly driving increased illegal and unsustainable logging, posing a real threat to governance, the rule of law and the viability Myanmar's dwindling forests.

EIA research shows that, based on current trends, the two most targeted Hongmu species in Myanmar - *tamalan* and *padauk* - could be logged to commercial extinction in as little as three years.

With financial rewards for illegal loggers and timber smugglers dwarfing traditional incomes, and evidence of corruption facilitating illegal business, Myanmar's domestic controls will be unable to effectively stem illegal trade.

Myanmar urgently needs to engender legal reciprocity from strategic timber trade partners, particularly China, to ensure Myanmar's forestry and trade laws are respected along its land border.

In the absence of laws prohibiting illegal timber in China, the Convention on International Trade in Endangered Species (CITES) presents the most immediate and effective mechanism to secure China's respect for Myanmar's forestry and trade laws.

The Myanmar Government should seek CITES Appendix III protection for its at-risk Hongmu species - *Dalbergia oliveri* / *bariensis* (*tamalan*) and *Pterocarpus macrocarpus* (*padauk*) - at the soonest opportunity to ensure trade is in line with sustainable exploitation of existing standing stocks.

The CITES community should assist Myanmar in both instituting and enforcing CITES listings for these key species, and in seeking regional Appendix II listings by the 17th CITES Conference of the Parties (CoP17) in 2016. Enhancing the capacity of Myanmar's existing CITES Management and Scientific Authorities will be an important element of this work.

THE HONGMU THREAT

An unprecedented boom in the popularity of reproduction Qing and Ming dynasty furniture in China made with high-value luxury redwood, or rosewood species - known as Hongmu - is placing completely unsustainable demands on forests throughout the Mekong region and worldwide.

With virtually no stocks of its own, China is almost entirely reliant on imports for its burgeoning Hongmu industry; in 2013, Hongmu imports into China grew an incredible 52 per cent, aided substantially by a 40 per cent growth in Hongmu log imports alone. High value luxury Hongmu timbers made up a staggering 39 per cent of China's total hardwood log imports in 2013¹.

Despite diversifying its supply base into African and Latin American countries in recent years,

China's reliance on South-East Asia Hongmu timber sources remains profound, comprising 65 per cent of total imports in 2013.

MYANMAR'S HONGMU SPECIES

Thirty-three timber species are included in the 2000 China National Hongmu Standard, six of which are found in Myanmar and are captured in China's import data under its dedicated Hongmu Customs Code (HS Code: 44039930).

These include **tamalan / Burmese rosewood** (*Dalbergia oliveri* / *bariensis*), **Burmese padauk** (*Pterocarpus macrocarpus*), **Burma Blackwood** (*Dalbergia cultrate*), **Ceylon ebony** (*Diospyros ebenum*), **Burma thinwin** (*Millettia leucantha*) and **Red Sanders** (*Pterocarpus santalinus*).

Of these, it appears that tamalan and padauk are the most commonly available and traded species, and the focus of Chinese traders².

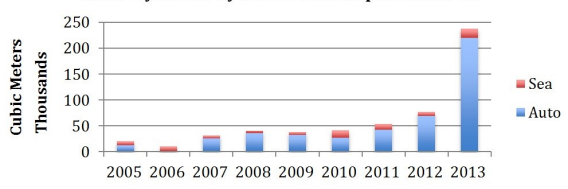
Priority Species at Risk from Illegal Trade				
	Common Names	Scientific Name	Range	Status
Tamalan	Burmese rosewood, Burmese tulipwood, Miandian huazhi (缅甸)花枝	<i>Dalbergia oliveri</i> / <i>Dalbergia bariensis</i> (synonymous)	Myanmar; Thailand; Vietnam	Endangered A1cd ver 2.3 (Needs updating) ³ A 1998 Dutch study proposed a CITES Appendix II listing ⁴
Distribution & Stocks in Myanmar	Total Estimated Stocks: 1.6 million cubic meters. Highest densities in Sagaing division (over two million trees embodying 850,000 cubic tons / 1,203,600 m ³), followed by Shan state (900,000 trees embodying 250,000 tons / 354,000 m ³). Madalay and Kachin and other states have substantially less, about 100-150,000 tons / 141,600 - 212,400 m ³ combined ⁵ .			
Padauk	Burmese padauk, mai pradoo, pradoo, mai Dou, Go Huang, Miandian huali (缅甸)花梨	<i>Pterocarpus macrocarpus</i>	Myanmar, Thailand, Cambodia, Vietnam, Laos	Heavily threatened by trade across its range, and protected in Cambodia ⁶
Distribution & Stocks in Myanmar	Total Estimated Stocks: 1.4 million cubic meters. Shan state has the highest density (1.125 million trees embodying 450,000 cubic tons / 637,200 m ³). Magway (250,000 tons / 354,000 m ³) and Mandalay (150,000 tons / 212,400 m ³), and Sagaing (100,000 tons / 141,600 m ³) are the only other stocks of note ⁷ . Myanmar has between 15,527 and 17,426 ha of padauk plantations ⁸ . Padauk flowers are recognised as the National flower of Myanmar ⁹ .			
Legal Status in Myanmar: Both tamalan and padauk are "group 1 species" and are classified as "reserved" in Myanmar. This means they can only be harvested and traded with express permission of MOECF.				

UNSUSTAINABLY BOOMING CHINESE DEMAND

Trade data shows that China's Hongmu industry clearly has Myanmar's forests in its sights. Between 2000-13, China imported 624,000 m³ of Hongmu logs worth US\$737 million from Myanmar.

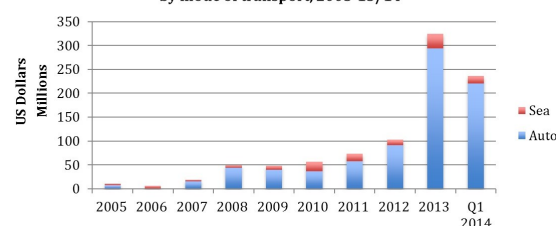
Incredibly, nearly a third of this trade volume and value occurred in the past year alone. China's total 2013 imports of Myanmar Hongmu logs by land and sea reached 237,000 m³ worth US\$324 million - triple the volume and value of that recorded in 2012, and nearly six times the 2010 trade (*figures 1 & 2*).

Figure 1: Volume of Chinese imports of Hongmu logs from Myanmar by mode of transport 2005-13



Signs of extreme growth are already showing for 2014. The value of Chinese Hongmu imports from Myanmar between January and April 2014 alone constitutes more than 72 per cent of the 2013

Figure 2: Value of Chinese imports of Hongmu logs from Myanmar by mode of transport, 2005-13/14



total, and more than double 2012 trade (*figure 2 above, and figure 6 in annex 1*).

Virtually overnight, Myanmar has become the biggest Hongmu log supplier to China worldwide, surpassing more traditional suppliers such as Vietnam and Laos (*see figure 5 in annex 1*).

Worryingly, US\$52 million of imports have occurred by land since Myanmar's national log export ban came into effect on April 1, 2014¹⁰ (*see figure 6 in annex 1*).

Such exponential growth in demand raises the distinct likelihood that, without immediate and robust intervention, the very limited number of species of timber concerned will be consumed to commercial extinction in a relatively few years.

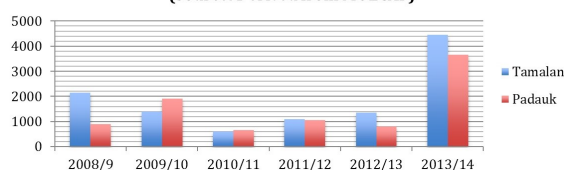
SEIZURES RISE WITH CHINESE DEMAND

Chinese demand for Hongmu is clearly driving illegal logging and timber smuggling in Myanmar.

Government seizures of illegal rosewood timber species during law enforcement in Myanmar since 2008 have followed almost exactly the same pattern as imports of Hongmu logs into China's Yunnan Province. They have also focused on two specific species - tamalan and padauk. Seizures of both species more than trebled in 2013/14 - exactly as did Yunnan's imports of Hongmu logs¹¹ (*figure 3*).

Tamalan dominated recent seizures in March and April in Mandalay, where 500 cubic tons of tamalan and 57 cubic tons of padauk were confiscated, further confirming the species as

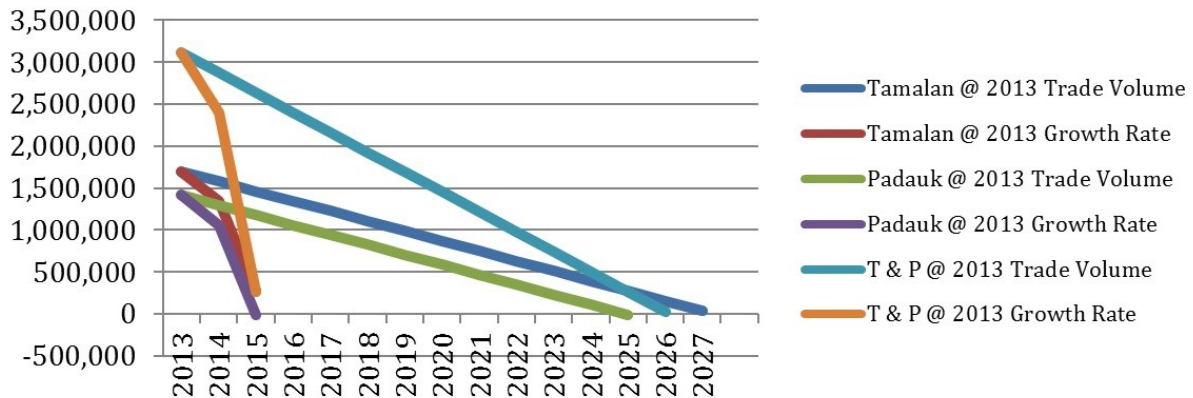
Figure 3: Reported Seizures of Tamalan & Padauk in Myanmar 2008-2013, Cubic Tons (Source: Derived from MOECAF)



major targets of Chinese demand¹². Such seizures are breaking records in Myanmar, where previously only up to 50 tons a year would be confiscated¹³. Illegal logging has also dramatically increased in Sagaing, where tamalan densities are highest¹⁴.

One courier interviewed after a seizure appeared to confirm that Chinese demand is now highly focused on tamalan, reportedly stating: "Chinese buyers ... do not even buy teak, only tamalan"¹⁵.

Figure 4: Tamalan and Padauk Standing Stock Reduction Projections, Based on Two Chinese Demand Scenarios



DEMANDING EXTINCTION

While EIA understands that efforts are ongoing to prevent logging and smuggling of high value species for the Hongmu industry, key species are likely to suffer the same fate as Siamese rosewood has in Thailand, Laos, Vietnam and Cambodia unless rapid action is taken.

Ministry of Environmental Conservation and Forestry (MOECAF) data suggests Myanmar's forests have a standing stock of roughly 1.2 million cubic tons of tamalan (1,699,200 m³) and roughly one million cubic tons of padauk (1,416,000 m³).

Assuming for experimental sake that these two species constitute all of current Hongmu log

trade with China, some very worrying scenarios emerge.

If 2013 Chinese import volumes (240,000 m³) were replicated indefinitely into the future, the 3.1 million m³ (2.2 million cubic tons) of tamalan and padauk in Myanmar's forests would be completely consumed in 13 years or less.

If, however, trade growth rates continue at 2013 levels (300 per cent growth on 2012 trade), then these two species would be completely logged out in just two to three years (*figure 4*).

A realistic timeframe for commercial extinction would therefore be somewhere between 3-13 years. Clearly, there is little room for complacency if these species are to be saved.

ILLEGAL BORDER TRADE

Nearly 78 per cent of China's Hongmu log imports since 2000 (490,000 m³) were imported by land through Yunnan province, which embodies China's land border with Myanmar.

Such land border log exports have been illegal in Myanmar for years, regardless of species¹⁶, and remain so in light of Myanmar's April 2014 enforcement of a new overarching national log export ban.

The trade also appears to contradict legal restrictions on log imports into China over the

land border, widely reported to have been instituted in Yunnan in 2006¹⁷. While reaching a low that single year, import volumes have grown every year but two since 2006, and in value every year but one.

Myanmar Hongmu species reportedly fulfilled 20 per cent of Yunnan Province's total 2012 wood product inputs, with districts such as Kunming registering 80 per cent of its Hongmu imports from Myanmar¹⁸. The proportion may have trebled since.

National Geographic magazine recently explored how the cross-border timber trade in 2013

threatens the ongoing negotiation of peace agreements with ethnic groups in Kachin and elsewhere, in an article entitled '*Chinese Logging Threatens Myanmar Ceasefire*'¹⁹.

Clearly, illegal trade is the norm in China's

Hongmu imports from Myanmar. It is vital that Myanmar does all it can to ensure China does not allow illegal redwoods entry into its territory from Myanmar. Until China prohibits illegal timber, CITES is the best opportunity to attain legal reciprocity in China.



Illegal tamalan flitches, Sagaing Division, Myanmar, April 2014 (anonymously provided to EIA, June 2014)

BUYING THE RULE OF LAW

The financial incentives for illegal logging and timber smuggling present serious governance challenges for any country suffering a Chinese rush on Hongmu, and Myanmar is no exception as Chinese traders pay increasingly higher prices for ever-growing volumes of ever-decreasing supplies and probe new areas as old regions become depleted. Corruption plays a significant role²⁰.

Unless measures are put in place to ensure Myanmar's trade policies are respected by its trade partners, the financial rewards for illegal logging and timber smuggling will make the Government's enforcement task insurmountable. Unregulated rampant demand will ensure supply, legal or illegal.

Prices for Burmese padauk have been heavily fluctuating as Chinese buyers and speculative investors increasingly bet on the species as a replacement for very rare traditional Hongmu

species such as Hainan Huanghuali and *Dalbergia cochinchinensis*, which have effectively been logged out²¹.

Financial rewards for truck drivers are reportedly as high as nine million kyat for one trip from Mandalay to Muse, earning those who take the risk up to Ks300 million (US\$300,000) in a three-month season²². Signs are already emerging that Government officials are taking bribes to allow illegal transports of tamalan and padauk across the China land border²³.

In Laos, Thailand, Vietnam and Cambodia, the rule of law has effectively been swept aside by sky-high financial incentives for forest and timber sector crime²⁴.

Ensuring Chinese demand is brought into line with sustainable harvests is the only way to prevent a wave of forest crime from sweeping across Myanmar's rosewood forests, as it has swept across other Mekong range states.



THE NEED FOR INTERNATIONAL CITES CONTROLS FOR MYANMAR'S HONGMU SPECIES

CITES is a multilateral environmental agreement under the United Nations, with over 170 national signatories, including Myanmar and China.

CITES provides trade regulation, monitoring and enforcement mechanisms not otherwise available to national governments alone.

CITES APPENDICES

CITES operates through the listing of endangered species in one of its three appendices, which offer differing levels of protection:

Appendix I: a total international trade ban for critically endangered species;

Appendix II: regulates trade in threatened species. Controlled trade is allowed, subject to issuance of CITES permits against agreed sustainable quotas. Species listings must be agreed by all range states;

Appendix III: regulates trade in threatened species. Individual range states can unilaterally list stocks of domestic species on Appendix III as an emergency measure, and do not require the agreement of other parties.

Illegal logging and trade are justifications in themselves for species listings.

It is incumbent upon all parties to CITES to prohibit and seize imports of species listed on Appendix I, or those on Appendices II or III which are not accompanied by official CITES permits issued by the country of origin. In this way,

Examples of successful timber listings on CITES include ramin (*Gonystylus* spp.), which is on Appendix II, having previously been on Appendix III. Other rosewood species have protection under CITES, including *Dalbergia nigra* (Appendix I), *Dalbergia cochinchinensis* (Appendix II) and multiple species of Madagascar's *Dalbergia* and *Diospyros* Genus (Appendix II).

THE ROUTE TO CITES PROTECTION

The Government of Myanmar clearly has both the right and responsibility to seek CITES protection from rampant illegal and unsustainable trade with China for tamalan and padauk, preferably under Appendix II.

Proposing the listing of domestic stocks of the two species under Appendix III immediately as an emergency interim measure prior to a wider Appendix II listing at the next Conference of the Parties (CoP) would demonstrate the will of the Government to protect its dwindling forests and precious genetic resources.

In this way, *Dalbergia oliveri / bariensis* and *Pterocarpus macrocarpus* could be listed on Appendix III within four months. No imports of the species could then enter China without a CITES certificate.

CONCLUSIONS

In light of increased illegal logging, Myanmar needs to safeguard its forests from rampant and growing Chinese demand for valuable Hongmu species.

Trade and forestry data suggest that the key species targeted - tamlan and padauk - may be logged out in Myanmar in 3-13 years, based on existing demand trends.

Pursuing CITES protection for key at-risk species is the strongest immediate action Myanmar can take to ensure trade partners, particularly China, respect Myanmar's laws.

Myanmar should immediately and unilaterally request a CITES Appendix III listing for domestic stocks of these species before CoP17 and seek a wider Appendix II listing across species range states at CoP17.

The international community should support Myanmar's efforts to protect target species under CITES, through cooperative voting at CITES and, where appropriate, through the provision of improved capacity, technical advice and financial support.

ANNEX 1

Figure 5: Volume of Chinese Hongmu Log Imports from Top Three African, Central American and Asian Suppliers, 2005-13

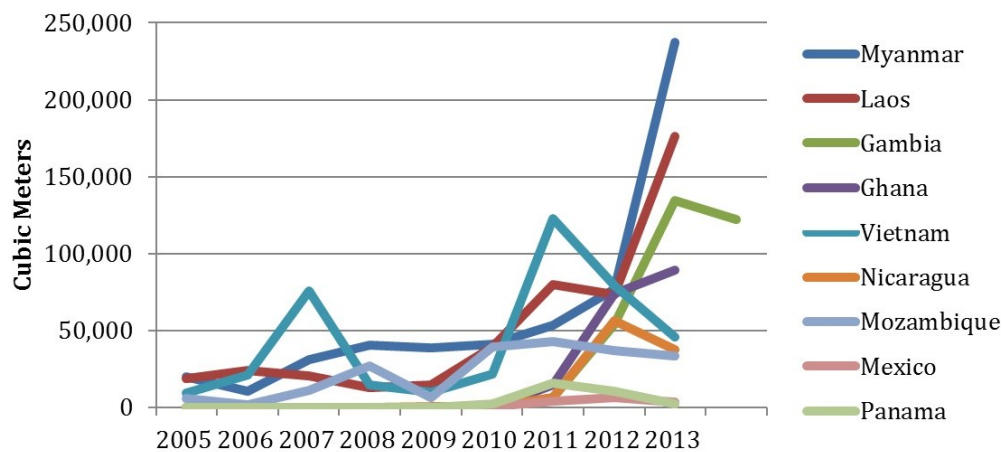
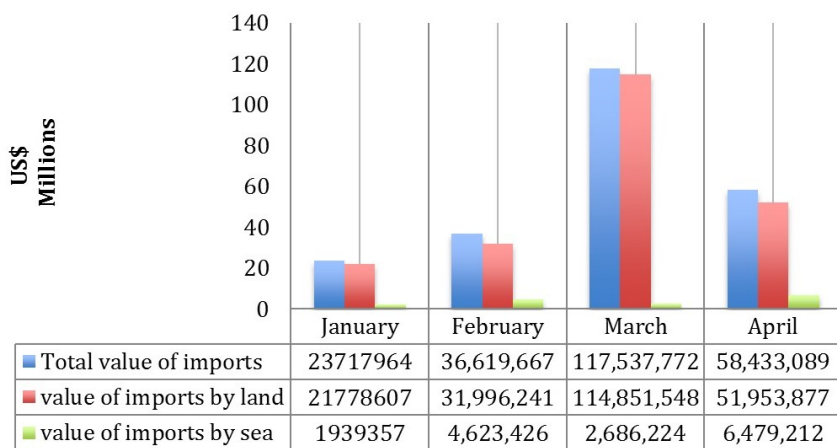


Figure 6: Value of Chinese Imports of Hongmu from Myanmar between January and April 2014





REFERENCES

1. ITTO Timber Trade Market Report 18:7, April 1-15, 2014
2. An increase in seizures of tamalan and padauk, their popularity as replacement species for rosewoods logged to commercial extinction in neighbouring countries (D.cochinchinesis in Laos, Thailand, Vietnam) and trader gossip, as well as price fluctuation in these species, and increases in illegal logging in tamalan-rich regions all evidence their centrality to Myanmar' spike in Hongmu exports to China
3. <http://www.iucnredlist.org/details/33247/0> & <http://www.iucnredlist.org/details/32306/0> Atcd means: Population reduction in the form of an observed, estimated, inferred or suspected reduction of at least 50 per cent over the past 10 years or three generations, whichever is the longer, based on a decline in area of occupancy, extent of occurrence and/or quality of habitat, and actual or potential levels of exploitation
4. Contribution to an evaluation of tree species using the new CITES Listing Criteria, World Conservation Monitoring Centre, on behalf of the CITES Management Authority of the Netherlands, December 1998 https://archive.org/stream/contributiontoev98wcmc/contributiontoev98wcmc_djvu.txt
5. Cubic ton figures estimated from: Myanmar Timber Trade and Rosewood Trade Policies, Nyi Nyi Kyaw, Director General, Forest Department, MOECA, March 25, 2014. http://www.forest-trends.org/documents/files/doc_4372.pdf. Converted to cubic metres using 1.416 m³/cu ton rate
6. <http://www.treeseedfa.org/doc/Monographs/Pterocarpusmacrocarpus.pdf>
7. Cubic ton figures estimated from *Myanmar Timber Trade and Rosewood Trade Policies*, Nyi Nyi Kyaw, Director General, Forest Department, MOECA, March 25, 2014. http://www.forest-trends.org/documents/files/doc_4372.pdf. Converted to cubic metres using 1.416 m³/cu ton rate
8. <http://www.fao.org/docrep/005/ac648e/ac648e08.htm>, & <http://en.skyflag.com/news/890.html>
9. <http://www.myanmarburma.com/attraction/94/national-symbols-of-myanmar-burma>
10. UNCOMTRADE
11. *Myanmar Timber Trade and Rosewood Trade Policies*, Nyi Nyi Kyaw, Director General, Forest Department, MOECA, March 25, 2014
12. *Myanmar: Risk that timber smuggling will rise after logging ban*, May 30, 2014 http://www.ihb.de/wood/news/Myanmar_loggingban_illegal_timber_smuggling_37222.html
13. *Record Breaking Seizures of Illegal Timber in Mandalay*, Eleven Media Group, April 29, 2014
14. *Authorities to Impose Curfew in Sagaing Reserve as Illegal Logging Increases*, Eleven Media, November 29, 2013; *Illegal Loggers get an Easy Ride in Sagaing*, Myanmar Times, January 26, 2014; *Doubts over Log Export Ban*, Myanmar Times, April 10, 2014; *Chinese Illegal Logging Problem Worsen in Myanmar*, Eleven Media, May 3, 2013
15. *Myanmar: Risk that timber smuggling will rise after logging ban*, May 30, 2014 http://www.ihb.de/wood/news/Myanmar_loggingban_illegal_timber_smuggling_37222.html
16. *Myanmar protested to China over illegal timber, minerals exports: Minister*, Mizima, February 27, 2014
17. *Interim measures to manage timber and mineral cooperation between Myanmar and Yunnan Province*. Issued by Office of Yunnan Provincial People's Government on May 11, 2006. Policy reference number: Policy Office, Yunnan [2006] 91, cited in *Forest Trends Timber Trade Flows and Actors in Myanmar, The political economy of Myanmar's timber trade*, November 2013
18. http://www.forest-trends.org/documents/files/doc_4138.pdf
19. *Chinese Logging Threatens Myanmar Ceasefire*, National Geographic, May 2014
20. *Chinese Illegal Logging Problem Worsen in Myanmar*, Eleven Media, May 3, 2013
21. <http://www.wantchinatimes.com/news-subclass-cnt.aspx?id=20140206000002&cid=1103>
22. *Timber smuggling continues despite higher fees*, May 5, 2014. http://www.elevenmyanmar.com/index.php?option=com_content&view=article&id=5977:timber-smuggling-continues-despite-higher-fees&catid=33:business&Itemid=356
23. *Increasing illegal timber smuggling in Sagaing region, Irrawaddy*, April 22, 2014. <http://burma.irrawaddy.org/news/2014/04/22/57763.html>
24. *Routes to Extinction*, EIA, May 2014. <http://eia-international.org/routes-of-extinction-the-corruption-and-violence-destroying-siamese-rosewood-in-the-mekong>

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