

## A WEBOMETRICS ANALYSIS OF INDIAN AGRICULTURAL UNIVERSITIES

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### ABSTRACT:

A Webometrics analysis is carried out to analyze the impact study on the accessibility of e-resources from web pages of all the agricultural universities and colleges of India. Webometrics is tool for measuring the impact of the web. At present institutional websites become an indicator on the quality of the institution. In the case of agricultural university websites, it has more responsibility in providing information to the stake holders of agriculture rather than showcasing its achievements. This paper aims to find out an impact of the web usage on agricultural universities in India by applying webometrics tool in comparison with 2010 alexa page rank for agricultural universities and colleges in India. A total numbers of 70 universities in India are taken for analysis by the application of Alexa rank tool and Google page rank tool for better understanding of web traffic and its state wise impact.

**KEYWORDS:** Agricultural University Websites, Alexa page rank, Google page rank, state wise Agricultural universities

### INTRODUCTION:

A rapid change in all the sphere of life occurs in the 21st century and access to information is in handy. Since World Wide Web is most popular and resourceful for academic and other related research activities, it becomes necessary to evaluate them by using webometric activities. Accessibility of web resources and e-resources make a great impact on acquiring deep knowledge to expand the horizon of the students. All these are possible when the institutions impart quality materials over their websites. This ever increasing demand allows for a constant exchange of experience between the institution and the end user. Enhancement in web development and providing reliable resources increase the bond between the institutions and users in the form of a new channel of communication through internet.

### LITERATURE SURVEY:

The study carried out by S. Kothainayaki and S. Gopalakrishnan, Alexa traffic rank was given for every

agricultural universities and major colleges in India. Also it is been said that webometric study is found useful for search engine optimization for increase in search result and increase alexa page rank and Google page rank. The earlier study conducted by Rousseau on citation analysis in 1997 was based on hyperlinks to and from other websites, and that are considered as bibliographical citations in traditional analysis. Ingwersen (1998) found the idea of web impact factor by availing the web impact factor by calculating the average link frequencies and it helped in counting in number of back links which may point to a web document from other internet documents. Rodriguez and Gairin (1997) and Larson (1996) were also carried out a little work related to this topic and it was based on the structure analysis with the first pure informetric analysis of the web.

### OBJECTIVE OF THE STUDY:

The present paper explores the accessibility of e-resources by the stakeholders of agriculture from the websites of all the agricultural universities in India. Search engine optimization criteria and alexa rank is used to analyze the study for higher visibility. Alexa rank is also compared with 6 years of record given by S. Kothainayaki and S. Gopalakrishnan. State wise universities and colleges are also included for this study.

### ALEXA PAGE RANK:

Alexa's Traffic Ranks are based on the traffic data provided by users in Alexa's global data panel over a rolling 3 month period. Traffic Ranks are updated regularly. A site's ranking is based on a combined measure of Unique Visitors and Page views. Unique Visitors are determined by the number of unique Alexa users who visit a site on a given day. Page views are the total number of Alexa user URL requests for a site. However, multiple requests for the same URL on the same day by the same user are counted as a single Page view. The site with the highest combination of unique visitors and page views is ranked #1. Additionally data normalization is employed to correct for biases that may occur in data.

STATEWISE MAJOR UNIVERSITIES AND COLLEGES:

State	Universities
Andhra	3
Assam	1
Bihar	2
Chattisgarh	1
Gujrat	4
Haryana	3
Himachal Pradesh	2
Jammu and Kashmir	2
Jharkhand	2
Karnataka	6
Kerala	3
Madhya Pradesh	2
Maharashtra	7
Manipur	1
New Delhi	1
Nagaland	1
Odisha	1
Punjab	3
Rajshthan	5
Tamil Nadu	4
Telangana	2
Uttar Pradesh	9
Uttarakhand	1
West bengal	4

Table No.1. State wise universities and major agricultural colleges in India

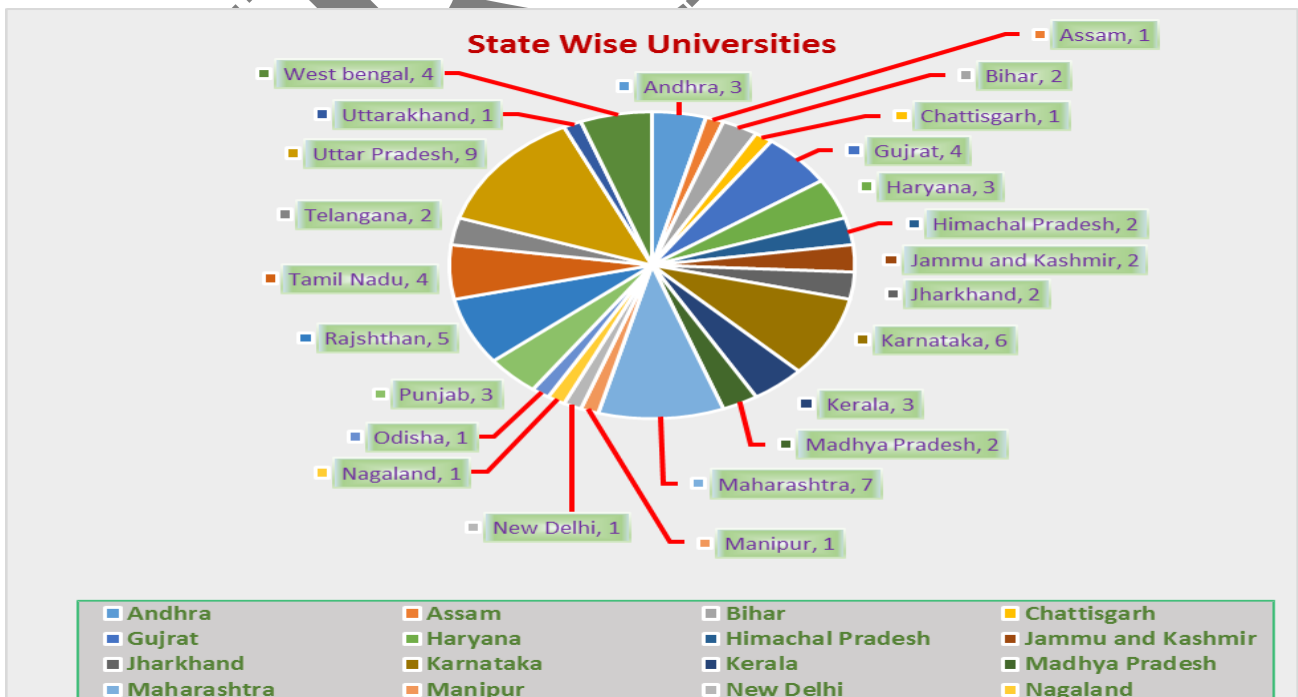


Fig. No.2. State wise contribution for agricultural universities in India

**WEBSITES OF UNIVERSITIES AND MAJOR COLLEGES IN INDIA:**

S. No.	University and Major colleges state wise	Website URL
<b>1.</b>	<b>Andhra Pradesh</b>	
	Dr. Y.S.R. Horticultural University, Venkataramannagudem, Tadepalli Gudem Mandal, West Godavari District	<a href="http://drysrhu.edu.in">http://drysrhu.edu.in</a>
	Sri Venkateswara Veterinary University, Tirupati	<a href="http://svvu.edu.in">http://svvu.edu.in</a>
	Acharya NG Ranga Agricultural University, Guntur	<a href="http://www.angrau.ac.in">http://www.angrau.ac.in</a>
<b>2.</b>	<b>Assam</b>	
	Assam Agricultural University, Jorhat	<a href="http://aau.ac.in">http://aau.ac.in</a>
<b>3.</b>	<b>Bihar</b>	
	Bihar Agricultural University, Bhagalpur	<a href="http://bausabour.ac.in">http://bausabour.ac.in</a>
	Dr. Rajendra Prasad Central Agriculture University, Samastipur	<a href="http://pusavarsity.org.in">http://pusavarsity.org.in</a>
<b>4.</b>	<b>Chhattisgarh</b>	
	Indira Gandhi Agricultural University, Raipur	<a href="http://igau.edu.in">http://igau.edu.in</a>
<b>5.</b>	<b>Gujarat</b>	
	Anand Agricultural University, Anand	<a href="http://aanu.in">http://aanu.in</a>
	Junagadh Agricultural University, Junagadh	<a href="http://jau.in">http://jau.in</a>
	Navsari Agricultural University, Navsari	<a href="http://nau.in">http://nau.in</a>
	Sardarkrushinagar Dantiwada Agricultural University, Banaskantha	<a href="http://sdau.edu.in">http://sdau.edu.in</a>
<b>6.</b>	<b>Haryana</b>	
	Chaudhary Charan Singh Haryana Agricultural University, Hisar	<a href="http://hau.ernet.in">http://hau.ernet.in</a>
	Lala Lajpat Rai University of Veterinary and Animal Sciences, Hisar	<a href="http://luvas.edu.in">http://luvas.edu.in</a>
	National Dairy Research Institute, Karnal	<a href="http://www.ndri.res.in">http://www.ndri.res.in</a>
<b>7.</b>	<b>Himachal Pradesh</b>	
	Chaudhary Sarwan Kumar Himachal Pradesh Krishi Vishvavidyalaya, Palampur	<a href="http://hillagric.ac.in">http://hillagric.ac.in</a>
	Dr. Yashwant Singh Parmar University of Horticulture and Forestry, Solan	<a href="http://yspuniversity.ac.in">http://yspuniversity.ac.in</a>
<b>8.</b>	<b>Jammu and Kashmir</b>	
	Sher-e-Kashmir University of Agricultural Sciences and Technology of Jammu, Jammu	<a href="http://skuast.org">http://skuast.org</a>
	Sher-e-Kashmir University of Agricultural Sciences and Technology of Kashmir, Srinagar	<a href="http://skuastkashmir.ac.in">http://skuastkashmir.ac.in</a>
<b>9.</b>	<b>Jharkhand</b>	
	Birsa Agricultural University, Kanke	<a href="http://bauranchi.org">http://bauranchi.org</a>
	Birsa Agricultural University, Ranchi	<a href="http://bauranchi.org">http://bauranchi.org</a>
<b>10.</b>	<b>Karnataka</b>	
	University of Agricultural Sciences and Technology, Bangalore	<a href="http://uasbangalore.edu.in">http://uasbangalore.edu.in</a>
	University of Agricultural Sciences, Dharwad	<a href="http://uasd.edu">http://uasd.edu</a>
	University of Agricultural Sciences, Raichur	<a href="http://uasraichur.edu.in">http://uasraichur.edu.in</a>
	University of Horticultural Sciences, Bagalkot	<a href="http://uhsbagalkot.edu.in">http://uhsbagalkot.edu.in</a>
	Karnataka Veterinary, Animal and Fisheries Sciences University, Bidar	<a href="http://kvafsu.kar.nic.in">http://kvafsu.kar.nic.in</a>
	University of Agricultural and Horticultural Sciences, Shimoga	<a href="http://uahs.in">http://uahs.in</a>
<b>11.</b>	<b>Kerala</b>	
	Kerala Agricultural University, Thrissur	<a href="http://kau.in">http://kau.in</a>
	Kerala University of Fisheries and Ocean Studies, Kochi	<a href="http://kufos.ac.in">http://kufos.ac.in</a>
	Kerala Veterinary and Animal Sciences University, Wayanad	<a href="http://kvasu.ac.in">http://kvasu.ac.in</a>

<b>12.</b>	<b>Madhya Pradesh</b>	
	Jawaharlal Nehru Agricultural University, Jabalpur	<a href="http://jnkvv.nic.in">http://jnkvv.nic.in</a>
	Rajmata Vijayaraje Scindia Krishi Vishwa Vidyalaya, Gwalior	<a href="http://rvskvv.ne">http://rvskvv.ne</a>
<b>13.</b>	<b>Maharashtra</b>	
	Central Institute of Fisheries Education, Mumbai	<a href="http://cife.edu.in">http://cife.edu.in</a>
	Dr. Balasaheb Sawant Konkan Krishi Vidyapeeth, Dapoli	<a href="http://dbskkv.org">http://dbskkv.org</a>
	Dr. Panjabrao Deshmukh Krishi Vidyapeeth, Akola	<a href="http://pdkv.ac.in">http://pdkv.ac.in</a>
	Maharashtra Animal and Fishery Sciences University	<a href="http://mafsu.in">http://mafsu.in</a>
	Mahatma Phule Krishi Vidyapeeth, Rahuri	<a href="http://mpkv.ac.in">http://mpkv.ac.in</a>
	vasantrao naik marathwada krishi vidyapeeth, parbhani	<a href="http://vnmkv.ac.in">http://vnmkv.ac.in</a>
	National Backward Krishi Vidyapeeth, Solapur	<a href="http://nbkeduit.in">http://nbkeduit.in</a>
<b>14.</b>	<b>Manipur</b>	
	Central Agricultural University, Iroisemba	<a href="http://cau.ac.in">http://cau.ac.in</a>
<b>15.</b>	<b>New Delhi</b>	
	Indian Agricultural Research Institute, New Delhi	<a href="http://iari.res.in">http://iari.res.in</a>
<b>16.</b>	<b>Nagaland</b>	
	Nagaland University	<a href="http://nagalanduniversity.ac.in">http://nagalanduniversity.ac.in</a>
<b>17.</b>	<b>Odisha</b>	
	Orissa University of Agriculture and Technology, Bhubaneswar	<a href="http://ouat.ac.in">http://ouat.ac.in</a>
<b>18.</b>	<b>Punjab</b>	
	Desh Bhagat School of Agriculture Sciences, Desh Bhagat University, Mandi Gobindgarh	<a href="http://deshbhagatuniversity.in">http://deshbhagatuniversity.in</a>
	Guru Angad Dev Veterinary and Animal Sciences University, Ludhiana	<a href="http://gadvasu.in/">http://gadvasu.in/</a>
	Punjab Agricultural University, Ludhiana	<a href="http://pau.edu">http://pau.edu</a>
<b>19.</b>	<b>Rajasthan</b>	
	Agriculture University, Jodhpur	<a href="http://au-ju.org">http://au-ju.org</a>
	Agriculture University, Kota	<a href="http://aukota.org">http://aukota.org</a>
	Maharana Pratap University of Agriculture and Technology, Udaipur	<a href="http://mpuat.ac.in">http://mpuat.ac.in</a>
	Shri Karan Narendra Agriculture University, Jobner	<a href="http://sknau.ac.in">http://sknau.ac.in</a>
	Swami Keshwanand Rajasthan Agricultural University, Bikaner	<a href="http://raubikaner.org">http://raubikaner.org</a>
<b>20.</b>	<b>Tamil Nadu</b>	
	Tamil Nadu Agricultural University, Coimbatore	<a href="http://tnau.ac.in">http://tnau.ac.in</a>
	Tamil Nadu Veterinary and Animal Sciences University, Chennai	<a href="http://tanuvas.tn.nic.in">http://tanuvas.tn.nic.in</a>
	Tamil Nadu Fisheries University, Nagapattinam	<a href="http://tnfu.ac.in">http://tnfu.ac.in</a>
	Annamalai University, Chidambaram	<a href="http://annamalaiuniversity.ac.in">http://annamalaiuniversity.ac.in</a>
<b>21.</b>	<b>Telangana</b>	
	Professor Jayashankar Telangana State Agricultural University, Hyderabad	<a href="http://pjtsau.ac.in">http://pjtsau.ac.in</a>
	Sri Konda Laxman Telangana State Horticultural University, Hyderabad	<a href="http://skltshu.ac.in">http://skltshu.ac.in</a>
<b>22.</b>	<b>Uttar Pradesh</b>	
	Aligarh Muslim University, Aligarh	<a href="http://amu.ac.in">http://amu.ac.in</a>
	Banaras Hindu University, Varanasi	<a href="http://bhu.ac.in">http://bhu.ac.in</a>
	Chandra Shekhar Azad University of Agriculture and Technology, Kanpur	<a href="http://csauk.ac.in">http://csauk.ac.in</a>

	Chaudhary Charan Singh University, Meerut	<a href="http://ccsuniversity.ac.in">http://ccsuniversity.ac.in</a>
	Indian Veterinary Research Institute, Bareilly	<a href="http://ivri.nic.in">http://ivri.nic.in</a>
	Narendra Dev University of Agriculture and Technology, Faizabad	<a href="http://nduat.in">http://nduat.in</a>
	Sam Higginbottom Institute of Agriculture, Technology and Sciences, Allahabad	<a href="http://shiats.edu.in">http://shiats.edu.in</a>
	Integral Institute of Agricultural Science and Technology (IIAST), Integral University, Lucknow	<a href="http://integraluniversity.ac.in">http://integraluniversity.ac.in</a>
	Sardar Balbhbhi Patel University of Agricultural Science & Technology [modipuram merut]	<a href="http://svbpm Meerut.ac.in">http://svbpm Meerut.ac.in</a>
<b>23.</b>	<b>Uttarakhand</b>	
	G. B. Pant University of Agriculture and Technology, Pantnagar	<a href="http://gbpuat.ac.in">http://gbpuat.ac.in</a>
<b>24.</b>	<b>West Bengal</b>	
	Bidhan Chandra Krishi Viswavidyalaya, Mohanpur	<a href="http://bckv.edu.in">http://bckv.edu.in</a>
	Uttar Banga Krishi Viswavidyalaya, Cooch Behar	<a href="http://ubkv.ac.in">http://ubkv.ac.in</a>
	Visva-Bharati University, Santiniketan	<a href="http://visvabharati.ac.in">http://visvabharati.ac.in</a>
	West Bengal University of Animal and Fishery Sciences, Kolkata	<a href="http://wbuafsc.ac.in">http://wbuafsc.ac.in</a>

**List of universities and their Alexa Page Rank in 2010 and 2016**

University and Major colleges state wise	Alexa Page Rank in 2010	Alexa Page Rank in 2016	RISE/FALL
Dr. Y.S.R. Horticultural University, Venkataramannagudem, Tadepalli Gudem Mandal, West Godavari District	NA	613,562	NA
Sri Venkateswara Veterinary University, Tirupati	7551119	801,539	FALL
Acharya NG Ranga Agricultural University, Bapatla	711942	176,218	FALL
Assam Agricultural University, Jorhat	1436829	306,898	FALL
Bihar Agricultural University, Bhagalpur	NA	699,836	NA
Dr. Rajendra Prasad Central Agriculture University, Samastipur	3893854	737,863	FALL
Indira Gandhi Agricultural University, Raipur	2724989	544311	FALL
Anand Agricultural University, Anand	495375	268,893	FALL
Junagadh Agricultural University, Junagadh	1322207	487,639	FALL
Navsari Agricultural University, Navsari	2489587	370,791	FALL
Sardarkrushinagar Dantiwada Agricultural University, Banaskantha	2354111	571,780	FALL
Chaudhary Charan Singh Haryana Agricultural University, Hisar	805500	234,861	FALL
Lala Lajpat Rai University of Veterinary and Animal Sciences, Hisar	NA	808,039	
National Dairy Research Institute, Karnal	2653632	294,794	FALL
Chaudhary Sarwan Kumar Himachal Pradesh Krishi Vishvavidyalaya, Palampur	1,000,810	194,739	FALL
Dr. Yashwant Singh Parmar University of Horticulture and Forestry, Solan	3072933	233,077	FALL

Sher-e-Kashmir University of Agricultural Sciences and Technology of Jammu, Jammu	2444659	888,233	
Sher-e-Kashmir University of Agricultural Sciences and Technology of Kashmir, Srinagar	8,810,463	435,185	FALL
Birsa Agricultural University, Kanke	2956976	952,254	FALL
Birsa Agricultural University, Ranchi	2,956,976	952,254	
University of Agricultural Sciences and Technology, Bangalore	916145	362,539	FALL
University of Agricultural Sciences, Dharwad	1464523	486,029	FALL
University of Agricultural Sciences, Raichur	7999544	602,551	
University of Horticultural Sciences, Bagalkot	3935330	877,761	FALL
Karnataka Veterinary, Animal and Fisheries Sciences University, Bidar	14364	3,781	FALL
University of Agricultural and Horticultural Sciences, Shimoga	NA	998,923	NA
Kerala Agricultural University, Vellanikkara, Thrissur	798826	271957	FALL
Kerala University of Fisheries and Ocean Studies, Kochi	NA	929,959	NA
Kerala Veterinary and Animal Sciences University, Wayanad	NA	549,562	NA
Jawaharlal Nehru Agricultural University, Jabalpur	NA	803,945	NA
Rajmata Vijayaraje Scindia Krishi Vishwa Vidyalaya, Gwalior	NA	0	NA
Central Institute of Fisheries Education, Mumbai	4,270,456	975,905	FALL
Dr. Balasaheb Sawant Konkan Krishi Vidyapeeth, Dapoli	3,250,361	449,613	FALL
Dr. Panjabrao Deshmukh Krishi Vidyapeeth, Akola	3206610	453,640	FALL
Maharashtra Animal and Fishery Sciences University	2588042	879,101	FALL
Mahatma Phule Krishi Vidyapeeth, Rahuri	102356	714,363	RISE
Vasantrao Naik Marathwada Krishi Vidyapeeth, parbhani	NA	1,160,132	NA
National Backward Krishi Vidyapeeth , Solapur, India	NA	0	NA
Central Agricultural University, Iroisemba	4270456	1551818	FALL
Indian Agricultural Research Institute, New Delhi	587316	121,319	FALL
Nagaland University	1721899	714973	FALL
Orissa University of Agriculture and Technology, Bhubaneswar	1027004	185,464	FALL
Desh Bhagat School of Agriculture Sciences, Desh Bhagat University, Mandi Gobindgarh	NA	761,096	NA
Guru Angad Dev Veterinary and Animal Sciences University, Ludhiana	3037364	318,337	FALL
Punjab Agricultural University, Ludhiana	609543	188,916	FALL
Agriculture University, Jodhpur	NA	0	NA
Agriculture University, Kota	NA	2,279,462	NA
Maharana Pratap University of Agriculture and Technology, Udaipur	NA	334,602	NA

Shri Karan Narendra Agriculture University, Jobner	NA	1,850,756	NA
Swami Keshwanand Rajasthan Agricultural University, Bikaner	2512510	835995	FALL
Annamalai University, Chidambaram	NA	37,984	NA
Tamil Nadu Agricultural University, Coimbatore	177239	55338	RISE
Tamil Nadu Fisheries University, Nagapattinam	NA	477,381	NA
Tamil Nadu Veterinary and Animal Sciences University, Madhavaram, Chennai	8561	11,370	FALL
Professor Jayashankar Telangana State Agricultural University, Hyderabad	NA	231,488	NA
Sri Konda Laxman Telangana State Horticultural University, Hyderabad	NA	1,943,233	NA
Aligarh Muslim University, Aligarh	157057	82,163	FALL
Banaras Hindu University, Varanasi	84144	51,014	RISE
Chandra Shekhar Azad University of Agriculture and Technology, Kanpur	2622419	1021865	FALL
Chaudhary Charan Singh University, Meerut	NA	41,537	NA
Indian Veterinary Research Institute, Bareilly	1599957	375,733	FALL
Narendra Dev University of Agriculture and Technology, Faizabad	NA	1,209,892	NA
Sam Higginbottom Institute of Agriculture, Technology and Sciences, Allahabad	13757118	216,905	FALL
Integral Institute of Agricultural Science and Technology (IAST), Integral University, Lucknow	NA	788,672	NA
sardar balhbhbi patel univerty of agriculture science & technology, banda university of agriculture & technolgy banda	NA	1,569,531	NA
G. B. Pant University of Agriculture and Technology, Pantnagar	NA	209,041	NA
Bidhan Chandra Krishi Viswavidyalaya, Mohanpur	1847204	300613	FALL
Uttar Banga Krishi Viswavidyalaya, Cooch Behar	4736757	532,159	FALL
Visva-Bharati University, Santiniketan	549382	112,857	FALL
West Bengal University of Animal and Fishery Sciences, Kolkata	3323747	2085987	FALL

#### CONCLUSION:

In this study, Alexa page rank is compared for six years gap and it is concluded that there is a sharp increase in the usage of internet in accessing resources on agriculture through computer and mobile, but there is a deep fall in website access for agricultural universities in India for finding information related to agricultural practices. It is an indication that agricultural universities in India are not sufficiently providing information needed for agricultural practices and other allied activities on their WebPages. e.g. weather data, seeds information, price forecasting, soil information and other related information that may vary from region to region and season to season. Focus need to be enhanced for providing sufficient information on all the agricultural related resources required for not only to the agricultural students and scientists, but also to all the

farmers of all region and to all crops. By updating this information on the website, this will enable all the stakeholders to make it more accessible on par with the international standard and there is no doubt, this will lead to an increased impact on the e accessing culture of agricultural university websites in India.

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