

## Main areas of research and scientific production regionalized by Policosanol biorefining route: from the 1990s to the 2024 (June).

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### PRESENTATION

The Table 1 presents the results of surveys, in 18 Ibero-American countries and in the world, carried out in the Science Citation Index Expanded (SCI-E) or Web of Science - Core Collection - Clarivate Analytics – (WoS) and Scopus (Elsevier): AR - Argentina, BR - Brazil, CL - Chile, CO - Colombia, CR - Costa Rica, CU - Cuba, DO - Dominican Republic, EC - Ecuador, ES - Spain, GT - Guatemala, HN - Honduras, MX - Mexico, NI - Nicaragua, PA - Panama, PE - Peru, PT - Portugal, SV - El Salvador, UY - Uruguay.

Merging the Scopus and Web of Science bases, the scientometric methodology of K-Synth (Bibliometrix) is applied here, according to which the scientific production of each country is measured by the number of appearances of authors by country affiliations. Thus, if in an article there are, for example, three authors working, respectively, in Brazil, Spain and the USA, the appearance counter will be increased by 1 for each of them. Due to the identification of some gaps, the electronically merged data were reconciled with the original databases.

As for the Main Subject Areas, the classification adopted is that of Scopus Elsevier, as well as the compiled data, as it is the most quantitatively complete basis for this research.

Data is updated until June 2024.

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**Table 1** - Main areas of research and scientific production regionalized by Policosanol biorefining route (from the 1990s to the 2024, June).

Route	Main Subject Areas			Prominent Countries					
	Scopus Rating	Articles	( %)	Non-Iberoamericans:			Iberoamericans		
				Nane	Articles	( %)	Nane	Articles	( %)
Saponification	Agricultural and Biological Sciences	5	23.8 %	China	11	50.00%	Spain	2	9.09%
	Chemistry	5	23.8 %	India	4	18.18%	Chile	1	4.55%
	Biochemistry, Genetics and Molecular Biology	3	14.3 %	South Korea	2	9.09%	Cuba	1	4.55%
	Chemical Engineering	2	9.5 %	Italy	1	4.55%			
	Medicine	2	9.5 %						
	Pharmacology, Toxicology and Pharmaceutics	2	9.5 %						
	Multidisciplinary	1	4.8 %						
	Nursing	1	4.8 %						
Solvent Extraction	Agricultural and Biological Sciences	9	30.0 %	Canada	4	14.29%	Cuba	6	21.43%
	Chemistry	9	30.0 %	China	4	14.29%	Spain	2	7.14%
	Biochemistry, Genetics and Molecular Biology	3	10.0 %	USA	3	10.71%	Chile	1	3.57%
	Chemical Engineering	2	6.7 %	Pakistan	2	7.14%			
	Engineering	2	6.7 %	South Korea	2	7.14%			
	Pharmacology, Toxicology and Pharmaceutics	2	6.7 %	Italy	1	3.57%			
	Immunology and Microbiology	1	3.3 %	Thailand	1	3.57%			
	Medicine	1	3.3 %	Taiwan	2	7.14%			
Molecular distillation <sup>d</sup>	Nursing	1	3.3 %						
	Agricultural and Biological Sciences	4	23.5 %	China	4	28.57%	Portugal	2	14.29%
	Chemistry	4	23.5 %	Thailand	3	21.43%			
	Biochemistry, Genetics and Molecular Biology	3	17.6 %	Indonesia	1	7.14%			
	Engineering	1	5.9 %	Italy	1	7.14%			
	Immunology and Microbiology	1	5.9 %	EUA	1	7.14%			
	Medicine	1	5.9 %	Taiwan	2	14.29%			
	Multidisciplinary	1	5.9 %						
Transesterification	Nursing	1	5.9 %						
	Pharmacology, Toxicology and Pharmaceutics	1	5.9 %						
	Chemistry	4	25.0 %	Thailand	3	30.00%	Mexico	1	10.00%
	Agricultural and Biological Sciences	3	18.8 %	China	3	30.00%			
	Biochemistry, Genetics and Molecular Biology	2	12.5 %	Taiwan	1	10.00%			
	Health Professions	1	6.3 %	Italy	1	10.00%			
	Immunology and Microbiology	1	6.3 %	USA	1	10.00%			
	Medicine	1	6.3 %						

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	Scopus Rating	Articles	( % )	Non-Iberoamericans:			Iberoamericans		
				Nane	Articles	( % )	Nane	Articles	( % )
Supercritical CO <sub>2</sub>	Multidisciplinary	1	6.3 %						
	Nursing	1	6.3 %						
	Pharmacology, Toxicology and Pharmaceutics	1	6.3 %						
	Social Sciences	1	6.3 %						
	Agricultural and Biological Sciences	14	21.88 %	UK	9	15.25%	Brazil	1	1.69%
	Chemistry	12	12.50 %	South Korea	8	13.56%	Spain	1	1.69%
	Biochemistry, Genetics and Molecular Biology	7	12.50 %	USA	7	11.86%			
	Pharmacology, Toxicology and Pharmaceutics	4	12.50 %	Italy	5	8.47%			
	Chemical Engineering	4	6.25 %	China	4	6.78%			
	Engineering	4	6.25 %	Thailand	4	6.78%			
	Immunology and Microbiology	2	6.25 %	Tunisia	4	6.78%			
	Materials Science	2	6.25 %	Canada	3	5.08%			
	Multidisciplinary	2	3.13 %	Egypt	2	3.39%			
	Environmental Science	2	3.13 %	Pakistan	2	3.39%			
	Health Professions	1	3.13 %	Benin	1	1.69%			
	Medicine	1	3.13 %	Japan	1	1.69%			
	Energy	1	3.13 %	Malaysia	1	1.69%			
	Nursing	1	21.88 %	Netherlands	1	1.69%			
	Social Sciences	1	12.50 %	France	1	1.69%			
				Nigeria	1	1.69%			
				Taiwan	3	5.08%			
Ultrasonic-assisted	Medicine	25	24.27 %	United States	15	12.0%	Cuba	10	8.00%
	Chemistry	14	13.59 %	Italy	12	9.6%	Mexico	1	0.80%
	Agricultural and Biological Sciences	14	13.59 %	Thailand	7	5.6%	Portugal	1	0.80%
	Biochemistry, Genetics and Molecular Biology	12	11.65 %	China	5	4.0%	Spain	1	0.80%
	Pharmacology, Toxicology and Pharmaceutics	11	10.68 %	Cuba	5	4.0%			
	Chemical Engineering	4	3.88 %	Poland	4	3.2%			
	Engineering	4	3.88 %	Germany	3	2.4%			
	Immunology and Microbiology	4	3.88 %	Taiwan	3	2.4%			
	Nursing	4	3.88 %	Austria	2	1.6%			
	Multidisciplinary	3	2.91 %	Egypt	2	1.6%			
	Materials Science	2	1.94 %	France	2	1.6%			
	Health Professions	2	1.94 %	Greece	2	1.6%			
	Social Sciences	2	1.94 %	India	2	1.6%			

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	Scopus Rating	Articles	( %)	Non-Iberoamericans:			Iberoamericans		
				Nane	Articles	( %)	Nane	Articles	( %)
	Energy	1	0.97 %	Japan	2	1.6%			
	Environmental Science	1	0.97 %	Netherlands	2	1.6%			
				Norway	2	1.6%			
				South Korea	2	1.6%			
				Tunisia	2	1.6%			
				United Kingdom	2	1.6%			
				Algeria	1	0.8%			
				Armenia	1	0.8%			
				Azerbaijan	1	0.8%			
				Belgium	1	0.8%			
				Benin	1	0.8%			
				Bosnia and Herzegovina	1	0.8%			
				Bulgaria	1	0.8%			
				Canada	1	0.8%			
				Croatia	1	0.8%			
				Cyprus	1	0.8%			
				Czech Republic	1	0.8%			
				Denmark	1	0.8%			
				Estonia	1	0.8%			
				Finland	1	0.8%			
				Georgia	1	0.8%			
				Hungary	1	0.8%			
				Iceland	1	0.8%			
				Ireland	1	0.8%			
				Israel	1	0.8%			
				Kazakhstan	1	0.8%			
				Kyrgyzstan	1	0.8%			
				Latvia	1	0.8%			
				Lebanon	1	0.8%			
				Lithuania	1	0.8%			
				Luxembourg	1	0.8%			
				Malaysia	1	0.8%			
				Malta	1	0.8%			
				Moldova	1	0.8%			

Route	Main Subject Areas			Prominent Countries					
	Scopus Rating	Articles	( %)	Non-Iberoamericans:			Iberoamericans		
				Nane	Articles	( %)	Nane	Articles	( %)
				Montenegro	1	0.8%			
				Morocco	1	0.8%			
				Nigeria	1	0.8%			
				North Macedonia	1	0.8%			
				Romania	1	0.8%			
				Russian Federation	1	0.8%			
				San Marino	1	0.8%			
				Saudi Arabia	1	0.8%			
				Serbia	1	0.8%			
				Slovakia	1	0.8%			
				Slovenia	1	0.8%			
				Sweden	1	0.8%			
				Switzerland	1	0.8%			
				Turkey	1	0.8%			
				Ukraine	1	0.8%			
				United Arab Emirates	1	0.8%			
				Undefined	2	1.6%			

Source: Author's elaboration, July 1, 2024.