List of Publications by Year in descending order

Source: https://exaly.com/author-pdf/5363893/publications.pdf Version: 2024-02-01



#	Article	IF	CITATIONS
1	A review of heartwood properties of Tectona grandis trees from fast-growth plantations. Wood Science and Technology, 2014, 48, 411-433.	1.4	74
2	Wood colour variation in sapwood and heartwood of young trees of Tectona grandis and its relationship with plantation characteristics, site, and decay resistance. Annals of Forest Science, 2010, 67, 109-109.	0.8	58
3	Relationship Between Wood Color Parameters Measured by the CIELab System and Extractive and Phenol Content in Acacia mangium and Vochysia guatemalensis from Fast-Growth Plantations. Molecules, 2012, 17, 3639-3652.	1.7	46
4	Effects of adding nano-clay (montmorillonite) on performance of polyvinyl acetate (PVAc) and urea-formaldehyde (UF) adhesives in Carapa guianensis, a tropical species. International Journal of Adhesion and Adhesives, 2015, 59, 62-70.	1.4	45
5	Fuelwood characteristics and its relation with extractives and chemical properties of ten fast-growth species in Costa Rica. Biomass and Bioenergy, 2013, 56, 14-21.	2.9	43
6	Variation of wood color parameters of Tectona grandis and its relationship with physical environmental factors. Annals of Forest Science, 2012, 69, 947-959.	0.8	36
7	Thermogravimetric characteristics, its relation with extractives and chemical properties and combustion characteristics of ten fast-growth species in Costa Rica. Thermochimica Acta, 2013, 563, 12-21.	1.2	32
8	Grouping of Tectona grandis (L.f.) clones using wood color and stiffness. New Forests, 2011, 42, 329-345.	0.7	30
9	Comparative study on physical and mechanical properties of laminated veneer lumber and plywood panels made of wood from fast-growing Gmelina arborea trees. Journal of Wood Science, 2011, 57, 134-139.	0.9	29
10	Effects of adding TiO2 nanoparticles to a water-based varnish for wood applied to nine tropical woods of Costa Rica exposed to natural and accelerated weathering. Journal of Coatings Technology Research, 2017, 14, 141-152.	1.2	28
11	Short Rotation Wood Crops in Latin American: A Review on Status and Potential Uses as Biofuel. Energies, 2019, 12, 705.	1.6	28
12	Use of coffee (Coffea arabica) pulp for the production of briquettes and pellets for heat generation. Ciencia E Agrotecnologia, 2014, 38, 461-470.	1.5	25
13	Evaluation of wood properties from six native species of forest plantations in Costa Rica. Bosque, 2016, 37, 71-84.	0.1	25
14	Effect of Silver Nanoparticles Synthesized with NPsAg-Ethylene Glycol (C ₂ H ₆ O ₂) on Brown Decay and White Decay Fungi of Nine Tropical Woods. Journal of Nanoscience and Nanotechnology, 2017, 17, 5233-5240.	0.9	24
15	Production and quality analysis of pellets manufactured from five potential energy crops in the Northern Region of Costa Rica. Biomass and Bioenergy, 2016, 87, 84-95.	2.9	23
16	Biomass yield and energy potential of short-rotation energy plantations of Gmelina arborea one year old in Costa Rica. Industrial Crops and Products, 2016, 82, 63-73.	2.5	22
17	Physical and Compression Properties of Pellets Manufactured with the Biomass of Five Woody Tropical Species of Costa Rica Torrefied at Different Temperatures and Times. Energies, 2017, 10, 1205.	1.6	22
18	Thermogravimetric, Devolatilization Rate, and Differential Scanning Calorimetry Analyses of Biomass of Tropical Plantation Species of Costa Rica Torrefied at Different Temperatures and Times. Energies, 2018, 11, 696	1.6	22

ROGER MOYA

#	Article	IF	CITATIONS
19	Thermogravimetric and devolatilisation analysis for five plantation species: Effect of extractives, ash compositions, chemical compositions and energy parameters. Thermochimica Acta, 2017, 647, 36-46.	1.2	21
20	Study of light, middle and severe torrefaction and effects of extractivesÂand chemical compositions on torrefaction process by thermogravimetric analysis in five fast-growing plantations of CostaÂRica. Energy, 2018, 149, 1-10.	4.5	21
21	Moisture content variability in kiln-dried Gmelina arborea wood: effect of radial position and anatomical features. Journal of Wood Science, 2008, 54, 318-322.	0.9	19
22	The use of X-ray densitometry to evaluate the wood density profile of Tectona grandis trees growing in fast-growth plantations. Dendrochronologia, 2019, 55, 71-79.	1.0	19
23	Correlation and modeling between color variation and quality of the surface between accelerated and natural tropical weathering in <i>Acacia mangium</i> , <i>Cedrela odorata</i> and <i>Tectona grandis</i> wood with two coating. Color Research and Application, 2014, 39, 519-529.	0.8	18
24	Kiln-, Solar-, and Air-Drying Behavior of Lumber ofTectona grandisandGmelina arboreafrom Fast-Grown Plantations: Moisture Content, Wood Color, and Drying Defects. Drying Technology, 2014, 32, 301-310.	1.7	18
25	Acetylation of tropical hardwood species from forest plantations in Costa Rica: an FTIR spectroscopic analysis. Journal of Wood Science, 2020, 66, .	0.9	18
26	Early prediction of basic density, shrinking, presence of growth stress, and dynamic elastic modulus based on the morphological tree parameters of Tectona grandis. Journal of Wood Science, 2012, 58, 290-299.	0.9	17
27	Effect of CaCO3 on the wood properties of tropical hardwood species from fast-growth plantation in Costa Rica. BioResources, 2020, 15, 4802-4822.	0.5	17
28	Kiln drying behavior utilizing drying rate of lumber from six fast-growth plantation species in Costa Rica. Drying Technology, 2016, 34, 443-453.	1.7	16
29	Wood of Gmelina arborea in Costa Rica. New Forests, 2004, 28, 299-307.	0.7	15
30	Effect of management treatment and growing regions on wood properties of Gmelina arborea in Costa Rica. New Forests, 2004, 28, 325-330.	0.7	14
31	Kiln drying behavior of lumber from ten fast-growth plantation species in Costa Rica. Wood Material Science and Engineering, 2013, 8, 37-45.	1.1	14
32	Quality of Pellets Made from Agricultural and Forestry Crops in Costa Rican Tropical Climates. BioResources, 2014, 10, .	0.5	14
33	Visual identification, physical properties, ash composition, and water diffusion of wetwood in <i>Gmelina arborea</i> . Canadian Journal of Forest Research, 2009, 39, 537-545.	0.8	13
34	The effect of melamine formaldehyde impregnation and hot-pressing parameters on the density profile of densified poplar wood. European Journal of Wood and Wood Products, 2020, 78, 433-440.	1.3	13
35	Kiln Drying of <i>Acacia mangium</i> Willd Wood: Considerations of Moisture Content before and after Drying and Presence of Wet Pockets. Drying Technology, 2011, 29, 1845-1854.	1.7	12
36	WOOD CHARACTERIZATION OF ADULT CLONES OF TECTONA GRANDIS GROWING IN COSTA RICA. Cerne, 2015, 21, 353-362.	0.9	12

ROGER MOYA

#	Article	IF	CITATIONS
37	Pellets Evaluation Made from Tropical-Climate Agricultural and Forestry Crops of Costa Rica with a Domestic Stove. Waste and Biomass Valorization, 2015, 6, 1037-1046.	1.8	12
38	Micro- and Nanofibrillated Cellulose (MNFC) from Pineapple (<i>Ananas comosus</i>) Stems and Their Application on Polyvinyl Acetate (PVAc) and Urea-Formaldehyde (UF) Wood Adhesives. Journal of Nanomaterials, 2020, 2020, 1-12.	1.5	12
39	Heartwood formation and prediction of heartwood parameters in Tectona grandis L.f. trees growing in forest plantations in Costa Rica. Bois Et Forets Des Tropiques, 0, 335, 25.	0.2	12
40	Wood characteristics of Terminalia amazonia, Vochysia guatemalensis and Hyeronima alchorneoides planted in Costa Rica. Bosque, 2009, 30, .	0.1	11
41	Application of the X-ray densitometry in the evaluation of the quality and mechanical properties of biomass pellets. Fuel Processing Technology, 2015, 132, 62-73.	3.7	11
42	Effect of steam-drying treatment on moisture content, drying rate, color, and drying defects in juvenile wood of <i>Tectona grandis</i> from fast-growth plantations. Drying Technology, 2017, 35, 1832-1842.	1.7	11
43	CHARACTERISATION OF PELLETS MADE FROM OIL PALM RESIDUES IN COSTA RICA. Journal of Oil Palm Research, 2016, 28, 198-210.	2.1	11
44	Evaluating the strength of finger-jointed lumber of Gmelina arborea in Costa Rica. New Forests, 2004, 28, 319-323.	0.7	10
45	Variation des caractéristiques de la moelle des arbres de Gmelina arborea issus de plantations Ã croissance rapide au Costa Rica. Annals of Forest Science, 2008, 65, 612-612.	0.8	10
46	Steaming and Heating <i>Dipteryx panamensis</i> Logs from Fast-Grown Plantations: Reduction of Growth Strain and Effects on Quality. Forest Products Journal, 2021, 71, 3-10.	0.2	10
47	Propiedades fÃsico-mecánicas de tableros terciados construidos con especies tropicales de plantaciones para uso estructural. Cerne, 2012, 18, 317-325.	0.9	10
48	Development of heartwood, sapwood, bark, pith and specific gravity of teak (Tectona grandis) in fast-growing plantations in Costa Rica. Journal of Forestry Research, 2020, 31, 667-676.	1.7	9
49	Biopulp from Pineapple Leaf Fiber Produced by Colonization with Two White-Rot Fungi: Trametes versicolor and Pleurotus ostreatus. BioResources, 2016, 11, .	0.5	8
50	Radial variation of anatomical features, wood density and decay resistance in teak (Tectona grandis) from two qualities of growing sites and two climatic regions of Costa Rica. Forest Systems, 2009, 18, 119.	0.1	8
51	Evaluation of wood properties of four ages of Cedrela odorata trees growing in agroforestry systems with Theobroma cacao in Costa Rica. Agroforestry Systems, 2019, 93, 973-988.	0.9	7
52	Biomass and Bioenergy Production of <i>Arundo donax</i> L., <i>Pennisetum purpureum</i> Schum. and <i>Pennisetum purpureum</i> Schumack. × <i>Pennisetum glaucum</i> L. in Short Rotation Cropping System in Costa Rica. Journal of Biobased Materials and Bioenergy, 2015, 9, 572-579.	0.1	7
53	Biomass production and characteristics of short rotation plantations of clones of <i>Gmelina arborea</i> in three spacings. Silvae Genetica, 2019, 68, 92-100.	0.4	7
54	Successional variation in carbon content and wood specific gravity of four tropical tree species. Bosque, 2013, 34, 9-10.	0.1	6

#	Article	IF	CITATIONS
55	Effects of thinning on diameter, heartwood, density and drying defects of Gmelina arborea. Maderas: Ciencia Y Tecnologia, 2015, , 0-0.	0.7	6
56	Durability of Thermally Modified Wood of <i> Gmelina arborea</i> and <i> Tectona grandis</i> Tested under Field and Accelerated Conditions. Journal of Renewable Materials, 2017, 5, 208-219.	1.1	6
57	Effects on density, shrinking, color changing and chemical surface analysis through FTIR of Tectona grandis thermo-treated. Scientia Forestalis/Forest Sciences, 2016, 44, .	0.2	6
58	Variation in the wood anatomical structure of Gmelina arborea (Verbenaceae) trees at different ecological conditions in Costa Rica. Revista De Biologia Tropical, 2008, 56, 689-704.	0.1	6
59	Physical, mechanical and hydration kinetics of particleboards manufactured with woody biomass (Cupressus lusitanica, Gmelina arborea, Tectona grandis), agricultural resources, and Tetra Pak packages. Waste Management and Research, 2014, 32, 106-114.	2.2	5
60	Effects of Adding Multiwall Carbon Nanotubes on Performance of Polyvinyl Acetate and Urea-Formaldehyde Adhesives in Tropical Timber Species. Journal of Nanomaterials, 2015, 2015, 1-15.	1.5	5
61	Optical performance of finished and unfinished tropical timbers exposed to ultraviolet light in the field in Costa Rica. Wood Material Science and Engineering, 2016, 11, 62-78.	1.1	5
62	Evaluation of Changes in Tree Morphology Parameters, Biomass Yield, Chemical and Energy Properties at Three Spacings of Short Rotation Energy Plantations of Gmelina arborea in Costa Rica, from 1 to 2 Years of Age. Waste and Biomass Valorization, 2018, 9, 1163-1179.	1.8	5
63	Development of a Thermo-Hydro-Mechanical Device for Wood Densification Adaptable to Universal Testing Machines and Its Evaluation in a Tropical Species. Journal of Testing and Evaluation, 2021, 49, 2597-2608.	0.4	5
64	Fungal Decay, Coating, Burning Properties and Change of Color of Particleboards Manufactured with Woody Biomass, Agricultural Wastes and Tetra Pak Residues. Journal of Biomaterials and Nanobiotechnology, 2013, 04, 334-342.	1.0	5
65	Silviculture conditions and wood properties of Samanea saman and Enterolobium cyclocarpum in 19-year-old mixed plantations. Forest Systems, 2013, 22, 58.	0.1	5
66	Furfurylation of tropical wood species with and without silver nanoparticles: Part II: Evaluation of wood properties. Wood Material Science and Engineering, 2023, 18, 112-119.	1.1	5
67	Gmelina arborea "death disease―in fast-growth plantations: Effects of soil and climatic conditions on severity and incidence and its implications for wood quality. Forest Systems, 2018, 27, e003.	0.1	5
68	Application of the steaming step during kiln drying of lumber of two tropical species with high growth stress presence. Drying Technology, 2022, 40, 3231-3240.	1.7	5
69	Eefeito das propriedades fÃsicas e quÃmicas do solo em algumas propriedades da madeira de teca (Tectona grandis). Revista Arvore, 2010, 34, 1109-1118.	0.5	4
70	EFECTOS DE LA INTEMPERIE EN EL COLOR DE DOS ACABADOS APLICADOS EN MADERA DE CEDRELA ODORATA Y CARAPA GUIANENSIS. Maderas: Ciencia Y Tecnologia, 2010, 12, .	0.7	4
71	Mineral content in relation to radial position, altitude, chemical properties and density of Persian ironwood. Maderas: Ciencia Y Tecnologia, 2015, , 0-0.	0.7	4
72	Ultrasound velocity mapping to evaluate gluing quality in CLT panels from plantation wood species. Wood Science and Technology, 2021, 55, 681-696.	1.4	4

ROGER MOYA

#	Article	IF	CITATIONS
73	Physical and Energy Characteristics, Compression Strength and Chemical Modification of Charcoal Produced from Sixteen Tropical Woods in Costa Rica. Journal of Sustainable Forestry, 2023, 42, 151-169.	0.6	4
74	Characterization of torrefied biomass of five reforestation species (Cupressus lusitanica, Dipteryx) Tj ETQq0 0 0 rg 2017, 12, 7566-7589.	gBT /Over 0.5	ock 10 Tf 50 4
75	APROVECHAMIENTO E INDUSTRIALIZACIÓN DE DOS PLANTACIONES DE Gmelina arborea DE 15 AÑOS DE EDAD EN DIFERENTES CONDICIONES DE PENDIENTE. Revista Chapingo, Serie Ciencias Forestales Y Del Ambiente, 2013, XIX, 237-248.	0.1	4
76	Characteristics and properties of torrefied biomass pellets from Gmelina arborea and Dipterix panamensis at different times. Revista Chapingo, Serie Ciencias Forestales Y Del Ambiente, 2016, XXII, 325-337.	0.1	4
77	Evaluation of chemical compositions, air-dry, preservation and workability of eight fastgrowing plantation species in Costa Rica. Madera Bosques, 0, 21, .	0.1	4
78	Structure of the secondary xylem and development of a cambial variant in Serjania mexicana (Sapindaceae). IAWA Journal, 2021, 43, 103-115.	0.5	4
79	SURFACE CHEMICAL AND COLOR CHARACTERIZATION OF JUVENILE TECTONA GRANDIS WOOD SUBJECTED TO STEAM-DRYING TREATMENTS. Surface Review and Letters, 2016, 23, 1550091.	0.5	3
80	Evaluation of Bent Trees in Juvenile Teak (Tectona grandis L.f.) Plantations in Costa Rica: Effects on Tree Morphology and Wood Properties. Forests, 2017, 8, 79.	0.9	3
81	Development of successive cambia and formation of flat stems in Rhynchosia pyramidalis (Lam.) Urb. (Fabaceae). Plant Biosystems, 2018, 152, 1031-1038.	0.8	3
82	Effect of Thermo-Treatment on the Physical and Mechanical, Color, Fungal Durability of Wood of Tectona Grandis and Gmelina Arborea from Forest Plantations. Medziagotyra, 2018, 24, .	0.1	3
83	Production and Regression Models for Biomass and Carbon Captured in Gmelina arborea Roxb. Trees in Short Rotation Coppice Plantations in Costa Rica. Forests, 2019, 10, 593.	0.9	3
84	Wooden trusses using metal plate connections and fabricated with Gmelina arborea, Tectona grandis and Cupressus lusitanica timber from forest plantations. Journal of the Indian Academy of Wood Science, 2020, 17, 183-194.	0.3	3
85	Potential for pellet manufacturing with wood waste from construction in Costa Rica. Waste Management and Research, 2020, 38, 886-895.	2.2	3
86	Wood Properties and Their Variations in Teak. Compendium of Plant Genomes, 2021, , 103-137.	0.3	3
87	Furfurylation of tropical wood species with and without silver nanoparticles: Part I: Analysis with confocal laser scanning microscopy and FTIR spectroscopy. Wood Material Science and Engineering, 2022, 17, 410-419.	1.1	3
88	Evaluation of Unmanned Aerial Vehicles (UAV) as a Tool to Predict Biomass and Carbon of Tectona grandis in Silvopastoral Systems (SPS) in Costa Rica. Drones, 2021, 5, 47.	2.7	3
89	Production of Natural Fiber Obtained from the Leaves of Pineapple Plants (Ananas comosus) Cultivated in Costa Rica. , 2014, , 111-124.		3
90	Propiedades de curvas laminadas construidas con chapas vaporizadas con maderas de árboles de plantaciones de rápido crecimiento. Madera Bosques, 2011, 17, 85-101.	0.1	3

#	Article	IF	CITATIONS
91	Properties of wood from 7-year-old Cedrela odorata trees of two different populations growing in agroforestry systems with Theobroma cacao. Madera Bosques, 2017, 24, .	0.1	3
92	Effect of Urea Formaldehyde Resin Modified with Nano-Clay on Physical and Mechanical Properties of Particleboards Manufactured with Wood from Plantation Species. Journal of Biobased Materials and Bioenergy, 2018, 12, 482-492.	0.1	3
93	STRESS, DISPLACEMENT JOINTS OF GMELINA ARBOREA AND TECTONA GRANDIS WOOD WITH METAL PLATES, SCREWS AND NAILS FOR USE IN TIMBER TRUSS CONNECTIONS. Cerne, 2019, 25, 172-183.	0.9	3
94	Identification of endangered or threatened Costa Rican tree species by wood anatomy and fluorescence activity. Revista De Biologia Tropical, 2013, 61, 1133-56.	0.1	3
95	In Situ Synthesis of Fe3O4 Nanoparticles and Wood Composite Properties of Three Tropical Species. Materials, 2022, 15, 3394.	1.3	3
96	Behavior of a portable solar dryer for pineapple fiber. Ciencia E Agrotecnologia, 2012, 36, 674-683.	1.5	2
97	Energy Balance for Three Lignocellulosic Residues Using Different Drying Techniques. BioResources, 2013, 8, .	0.5	2
98	General, physical and mechanical properties, termites resistance and drying defects of lumber of Tectona grandis from plantations of different climatic and sites fertility condition. Journal of the Indian Academy of Wood Science, 2015, 12, 63-73.	0.3	2
99	Model Calibration of Prefabricated Timber Wall Frames Made of Hieronyma Alchorneoides and Gmelina Arborea Timber Using Nail and Screw Fasteners. Drvna Industrija, 2018, 69, 3-12.	0.3	2
100	Effect of nanoclay-treated UF resin on the physical and mechanical properties of plywood manufactured with wood from tropical fast growth plantations. Maderas: Ciencia Y Tecnologia, 2018, , 0-0.	0.7	2
101	Reduction of growth stresses in logs of Hieronyma alchorneoides Allemão from fast-growth plantations using steaming and heating: effects on the quality of lumber. Annals of Forest Science, 2021, 78, 1.	0.8	2
102	Diseño, resistencia, tablas de diseño, propuesta de empaque y manuales de uso de cerchas construidas con madera de Gmelina arborea e Hieronyma alchorneoides de plantaciones forestales en Costa Rica. Revista Forestal Mesoamericana Kurú, 2017, 14, 55.	0.1	2
103	Evaluación de la incidencia de pellets y astillas de madera en el desempeño de un gasificador tipo "downdraft― Revista Forestal Mesoamericana Kurú, 0, 15, 23-34.	0.1	2
104	Vigas tipo I para la construcción civil fabricadas con madera de plantaciones de rápido crecimiento en Costa Rica. TecnologÃa En Marcha, 0, , 50.	0.1	2
105	Wood color variation in undried and kiln-dried plantation-grown lumber of Vochysia guatemalensis. Maderas: Ciencia Y Tecnologia, 2009, 11, .	0.7	2
106	CHARACTERIZATION OF PAULOWNIA TOMENTOSA STEUD TREES GROWN IN A 5-YEAR-OLD PLANTATION IN COSTA RICA. Cellulose Chemistry and Technology, 2021, 55, 743-753.	0.5	2
107	Reducing Warp and Checking in 4 by 4 Beams from Small-Diameter Tropical Species (Tectona) Tj ETQq1 1 0.7843 Products Journal, 2015, 65, 285-291.	814 rgBT / 0.2	Overlock 10 2
108	Variation and Genetic Control of the Heartwood, Sapwood, Bark, Wood Color Parameter, and Physical and Mechanical Properties of Dipteryx panamensis in Costa Rica. Forests, 2022, 13, 106.	0.9	2

#	Article	IF	CITATIONS
109	Mechanical performance in flexure for two spans of trusses from Hieronyma alchorneoides and Gmelina arborea woods fastened with nails and screws. Journal of Tropical Forest Science, 2018, 30, 330-341.	0.1	1
110	Actividades Socioeconómicas que emplean recursos naturales de la zona marÃtimo-terrestre y marina en Costa Rica y su relación con la variabilidad climática. PolÃtica Económica Para El Desarrollo Sostenible, 2017, 2, .	0.1	1
111	Percepción del mercado costarricense acerca del uso cerchas prefabricadas con madera de plantaciones forestales y unidas con placas metálicas. Revista Forestal Mesoamericana Kurú, 2018, 16, 35-46.	0.1	1
112	Propiedades de la biomasa de plantaciones de corta rotación de dos clones de Gmelina arborea Roxb en tres espaciamientos. Revista Forestal Mesoamericana Kurú, 2019, 16, 23-32.	0.1	1
113	CHANGES IN YIELD AND CHEMICAL COMPOSITION OF THREE-YEAR-OLD SHORT-ROTATION PLANTATIONS OF Dipteryx panamensis IN COSTA RICA. Revista Arvore, 0, 44, .	0.5	1
114	Production and Characteristics of Biomass for Arundo donax, Pennisetum purpureum, and P. purpureum × P. glaucum in a Short-Rotation Crop System in Humid Tropical Conditions in Costa Rica. Transactions of the ASABE, 2020, 63, 295-304.	1.1	0
115	Agronomic Effects of Tectona grandis Biochar from Wood Residues on the Growth of Young Cedrela odorata Plants in a Nursery. Agronomy, 2021, 11, 2079.	1.3	0
116	EFECTO DE LA FERTILIZACIÓN A LA PRADERA SOBRE LA FLEXIÓN ESTÃTICA DE Pinus radiata. D. Don. Maderas: Ciencia Y Tecnologia, 2002, 4, .	0.7	0
117	Technical study on the production of blocks with composites of cement-wooden wastes from pallets of Pinus sp. , 2019, 18, 5-15.		0
118	Simulación de gasificación de biomasa enriquecida con hidrocarburos. TecnologÃa En Marcha, 0, , .	0.1	0
119	The Effects of Jatropha curcas and Ricinus communis Seeds Addition on Coffee Pulp Waste Pellets as Fuel. Waste and Biomass Valorization, 0, , 1.	1.8	0
120	Effect of stem height in variation of bark, heartwood, sapwood and physical properties of wood in <i>Dipteryx panamensis</i> Pittier in a provenance/progeny test. Ciencia Florestal, 2022, 32, 141-162.	0.1	0