

## SUPPLEMENTARY MATERIAL

to the article E.O. Grishko, P.M. Borodin "Structure and evolution of metapolycentromeres"

Search elements and search results in the scholar.google.com database

Search elements	Articles found	Relevant articles found	DOI of relevant articles found
meta-polycentromere	2	1	<a href="https://doi.org/10.3390/ijms21103488">https://doi.org/10.3390/ijms21103488</a>
meta-polycentromeres	8	5	<a href="https://doi.org/10.3390/ijms21103488">https://doi.org/10.3390/ijms21103488</a> <a href="https://doi.org/10.1016/j.semcdb.2022.01.003">https://doi.org/10.1016/j.semcdb.2022.01.003</a> <a href="https://doi.org/10.1016/j.yexcr.2020.111974">https://doi.org/10.1016/j.yexcr.2020.111974</a> <a href="https://doi.org/10.1016/j.ceb.2021.12.007">https://doi.org/10.1016/j.ceb.2021.12.007</a> <a href="https://doi.org/10.1007/978-3-030-74889-0_5">https://doi.org/10.1007/978-3-030-74889-0_5</a>
metapolycentromere	7	6	<a href="https://doi.org/10.1371/journal.pgen.1010633">https://doi.org/10.1371/journal.pgen.1010633</a> <a href="https://doi.org/10.1371/journal.pgen.1009115">https://doi.org/10.1371/journal.pgen.1009115</a> <a href="https://doi.org/10.3389/fpls.2015.00913">https://doi.org/10.3389/fpls.2015.00913</a> <a href="https://doi.org/10.1016/j.molp.2017.12.009">https://doi.org/10.1016/j.molp.2017.12.009</a> <a href="https://doi.org/10.1600/036364416X692442">https://doi.org/10.1600/036364416X692442</a> <a href="https://doi.org/10.1101/2022.11.23.516916">https://doi.org/10.1101/2022.11.23.516916</a>
metapolycentromeres	7	6	<a href="https://doi.org/10.1371/journal.pgen.1010633">https://doi.org/10.1371/journal.pgen.1010633</a> <a href="https://doi.org/10.1371/journal.pgen.1009115">https://doi.org/10.1371/journal.pgen.1009115</a> <a href="https://doi.org/10.3389/fpls.2015.00913">https://doi.org/10.3389/fpls.2015.00913</a> <a href="https://doi.org/10.1016/j.molp.2017.12.009">https://doi.org/10.1016/j.molp.2017.12.009</a> <a href="https://doi.org/10.1600/036364416X692442">https://doi.org/10.1600/036364416X692442</a> <a href="https://doi.org/10.1101/2022.11.23.516916">https://doi.org/10.1101/2022.11.23.516916</a>
"metapoly centromere"	1	0	
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"meta polycentromere"	19	12	<a href="https://doi.org/10.3390/ijms21103488">https://doi.org/10.3390/ijms21103488</a> <a href="https://doi.org/10.1007/978-1-4612-6060-8_2">https://doi.org/10.1007/978-1-4612-6060-8_2</a> <a href="https://doi.org/10.1016/j.semcdb.2022.01.003">https://doi.org/10.1016/j.semcdb.2022.01.003</a> <a href="https://doi.org/10.1016/j.yexcr.2020.111974">https://doi.org/10.1016/j.yexcr.2020.111974</a> <a href="https://doi.org/10.1016/j.ceb.2021.12.007">https://doi.org/10.1016/j.ceb.2021.12.007</a> <a href="https://doi.org/10.1007/978-3-030-74889-0_5">https://doi.org/10.1007/978-3-030-74889-0_5</a> <a href="https://doi.org/10.3389/fpls.2015.00913">https://doi.org/10.3389/fpls.2015.00913</a> <a href="https://doi.org/10.11352/scr.24.21">https://doi.org/10.11352/scr.24.21</a> <a href="https://doi.org/10.11352/scr.24.29">https://doi.org/10.11352/scr.24.29</a> <a href="https://doi.org/10.1073/pnas.1512255112">https://doi.org/10.1073/pnas.1512255112</a> <a href="https://doi.org/10.3390/genes8090230">https://doi.org/10.3390/genes8090230</a> <a href="https://doi.org/10.3389/fpls.2016.00028">https://doi.org/10.3389/fpls.2016.00028</a>
"meta polycentromeres"	19	12	<a href="https://doi.org/10.3390/ijms21103488">https://doi.org/10.3390/ijms21103488</a> <a href="https://doi.org/10.1007/978-1-4612-6060-8_2">https://doi.org/10.1007/978-1-4612-6060-8_2</a> <a href="https://doi.org/10.1016/j.semcdb.2022.01.003">https://doi.org/10.1016/j.semcdb.2022.01.003</a> <a href="https://doi.org/10.1016/j.yexcr.2020.111974">https://doi.org/10.1016/j.yexcr.2020.111974</a> <a href="https://doi.org/10.1016/j.ceb.2021.12.007">https://doi.org/10.1016/j.ceb.2021.12.007</a> <a href="https://doi.org/10.1007/978-3-030-74889-0_5">https://doi.org/10.1007/978-3-030-74889-0_5</a> <a href="https://doi.org/10.3389/fpls.2015.00913">https://doi.org/10.3389/fpls.2015.00913</a> <a href="https://doi.org/10.11352/scr.24.21">https://doi.org/10.11352/scr.24.21</a> <a href="https://doi.org/10.11352/scr.24.29">https://doi.org/10.11352/scr.24.29</a> <a href="https://doi.org/10.1073/pnas.1512255112">https://doi.org/10.1073/pnas.1512255112</a> <a href="https://doi.org/10.3390/genes8090230">https://doi.org/10.3390/genes8090230</a> <a href="https://doi.org/10.3389/fpls.2016.00028">https://doi.org/10.3389/fpls.2016.00028</a>
"long centromere"	77	14	<a href="https://doi.org/10.1242/jcs.107.11.3091">https://doi.org/10.1242/jcs.107.11.3091</a> <a href="https://doi.org/10.1080/00837792.1984.10670350">https://doi.org/10.1080/00837792.1984.10670350</a> <a href="https://doi.org/10.1093/oxfordjournals.jhered.a109298">https://doi.org/10.1093/oxfordjournals.jhered.a109298</a> <a href="https://doi.org/10.1093/oxfordjournals.jhered.a109297">https://doi.org/10.1093/oxfordjournals.jhered.a109297</a> <a href="https://doi.org/10.1159/000131473">https://doi.org/10.1159/000131473</a> <a href="https://doi.org/10.1159/000132627">https://doi.org/10.1159/000132627</a> <a href="https://doi.org/10.1093/oxfordjournals.jhered.a109541">https://doi.org/10.1093/oxfordjournals.jhered.a109541</a> <a href="https://doi.org/10.3390/genes11080912">https://doi.org/10.3390/genes11080912</a> <a href="https://doi.org/10.1007/BF00985168">https://doi.org/10.1007/BF00985168</a> <a href="https://doi.org/10.1007/BF00333506">https://doi.org/10.1007/BF00333506</a> <a href="https://doi.org/10.1016/j.molp.2022.12.022">https://doi.org/10.1016/j.molp.2022.12.022</a> <a href="https://doi.org/10.1007/BF03052984">https://doi.org/10.1007/BF03052984</a> <a href="https://doi.org/10.1007/BF00984578">https://doi.org/10.1007/BF00984578</a> <a href="https://doi.org/10.1007/BF00983946">https://doi.org/10.1007/BF00983946</a>

**Table (continue)**

Search elements	Articles found	Relevant articles found	DOI of relevant articles found
"long centromeres"	59	23	<a href="https://doi.org/10.1186/s12862-016-0760-7">https://doi.org/10.1186/s12862-016-0760-7</a> <a href="https://doi.org/10.1007/BF00985168">https://doi.org/10.1007/BF00985168</a> <a href="https://doi.org/10.1186/s13072-015-0033-5">https://doi.org/10.1186/s13072-015-0033-5</a> <a href="https://doi.org/10.1371/journal.pgen.1009115">https://doi.org/10.1371/journal.pgen.1009115</a> <a href="https://doi.org/10.1186/s12862-018-1247-5">https://doi.org/10.1186/s12862-018-1247-5</a> <a href="https://doi.org/10.1371/journal.ppat.1010869">https://doi.org/10.1371/journal.ppat.1010869</a> <a href="https://doi.org/10.3390/cells11050761">https://doi.org/10.3390/cells11050761</a> <a href="https://doi.org/10.1159/000218129">https://doi.org/10.1159/000218129</a> <a href="https://doi.org/10.3390/ijms21103488">https://doi.org/10.3390/ijms21103488</a> <a href="https://doi.org/10.1159/000524681">https://doi.org/10.1159/000524681</a> <a href="https://doi.org/10.1111/imb.12759">https://doi.org/10.1111/imb.12759</a> <a href="https://doi.org/10.1007/s00412-022-00770-7">https://doi.org/10.1007/s00412-022-00770-7</a> <a href="https://doi.org/10.1101/2022.01.01.473627">https://doi.org/10.1101/2022.01.01.473627</a> <a href="https://doi.org/10.1007/s00412-020-00745-6">https://doi.org/10.1007/s00412-020-00745-6</a> <a href="https://doi.org/10.1242/jcs.203653">https://doi.org/10.1242/jcs.203653</a> <a href="https://doi.org/10.1007/s00040-020-00755-8">https://doi.org/10.1007/s00040-020-00755-8</a> <a href="https://doi.org/10.1186/s12863-018-0685-9">https://doi.org/10.1186/s12863-018-0685-9</a> <a href="https://doi.org/10.1007/s00040-020-00773-6">https://doi.org/10.1007/s00040-020-00773-6</a> <a href="https://doi.org/10.1038/s41559-019-1081-1">https://doi.org/10.1038/s41559-019-1081-1</a> <a href="https://doi.org/10.1007/s13592-020-00766-1">https://doi.org/10.1007/s13592-020-00766-1</a> <a href="https://doi.org/10.1007/s13127-017-0333-7">https://doi.org/10.1007/s13127-017-0333-7</a> <a href="https://doi.org/10.3390/genes14020371">https://doi.org/10.3390/genes14020371</a> <a href="https://doi.org/10.1007/s10709-020-00111-5">https://doi.org/10.1007/s10709-020-00111-5</a>
"huge centromeres"	0	0	
"huge centromere"	0	0	
"enormous centromeres"	1	0	
"enormous centromere"	1	0	
"extended centromeres"	56	27	<a href="https://doi.org/10.1371/journal.pgen.1009115">https://doi.org/10.1371/journal.pgen.1009115</a> <a href="https://doi.org/10.3389/fpls.2016.00234">https://doi.org/10.3389/fpls.2016.00234</a> <a href="https://doi.org/10.1038/29985">https://doi.org/10.1038/29985</a> <a href="https://doi.org/10.1038/hdy.1992.68">https://doi.org/10.1038/hdy.1992.68</a> <a href="https://doi.org/10.1038/29889">https://doi.org/10.1038/29889</a> <a href="https://doi.org/10.1242/jcs.109.11.2693">https://doi.org/10.1242/jcs.109.11.2693</a> <a href="https://doi.org/10.1007/s13237-018-0245-8">https://doi.org/10.1007/s13237-018-0245-8</a> <a href="https://doi.org/10.1159/000524681">https://doi.org/10.1159/000524681</a> <a href="https://doi.org/10.1101/2022.01.01.473627">https://doi.org/10.1101/2022.01.01.473627</a> <a href="https://doi.org/10.1534/genetics.107.082313">https://doi.org/10.1534/genetics.107.082313</a> <a href="https://doi.org/10.1007/s00412-016-0616-3">https://doi.org/10.1007/s00412-016-0616-3</a> <a href="https://doi.org/10.1093/molbev/msv070">https://doi.org/10.1093/molbev/msv070</a> <a href="https://doi.org/10.1159/000352069">https://doi.org/10.1159/000352069</a> <a href="https://doi.org/10.1083/jcb.113.5.1091">https://doi.org/10.1083/jcb.113.5.1091</a> <a href="https://doi.org/10.1371/journal.pgen.1008959">https://doi.org/10.1371/journal.pgen.1008959</a> <a href="https://doi.org/10.1093/gbe/evs048">https://doi.org/10.1093/gbe/evs048</a> <a href="https://doi.org/10.3390/cells11213373">https://doi.org/10.3390/cells11213373</a> <a href="https://doi.org/10.1007/s10577-021-09655-4">https://doi.org/10.1007/s10577-021-09655-4</a> <a href="https://doi.org/10.1182/blood.V93.12.4059">https://doi.org/10.1182/blood.V93.12.4059</a> <a href="https://doi.org/10.3390/genes9050254">https://doi.org/10.3390/genes9050254</a> <a href="https://doi.org/10.1186/s13062-016-0146-1">https://doi.org/10.1186/s13062-016-0146-1</a> <a href="https://doi.org/10.3390/genes14050999">https://doi.org/10.3390/genes14050999</a> <a href="https://doi.org/10.1083/jcb.201408025">https://doi.org/10.1083/jcb.201408025</a> <a href="https://doi.org/10.1038/hdy.2008.48">https://doi.org/10.1038/hdy.2008.48</a> <a href="https://doi.org/10.17615/gqwc-ds62">https://doi.org/10.17615/gqwc-ds62</a> <a href="https://doi.org/10.1101/2023.04.24.538079">https://doi.org/10.1101/2023.04.24.538079</a> <a href="https://doi.org/10.1093/jhered/esy040">https://doi.org/10.1093/jhered/esy040</a>

**Table (end)**

Search elements	Articles found	Relevant articles found	DOI of relevant articles found
"extended centromere"	61	12	<a href="https://doi.org/10.1007/s13237-018-0245-8">https://doi.org/10.1007/s13237-018-0245-8</a> <a href="https://doi.org/10.3390/ijms21103488">https://doi.org/10.3390/ijms21103488</a> <a href="https://doi.org/10.1242/jcs.107.11.3091">https://doi.org/10.1242/jcs.107.11.3091</a> <a href="https://doi.org/10.1508/cytologia.45.739">https://doi.org/10.1508/cytologia.45.739</a> <a href="https://doi.org/10.1038/29985">https://doi.org/10.1038/29985</a> <a href="https://doi.org/10.1093/nar/16.24.11645">https://doi.org/10.1093/nar/16.24.11645</a> <a href="https://doi.org/10.1007/BF00985440">https://doi.org/10.1007/BF00985440</a> <a href="https://doi.org/10.1023/A:1009281823488">https://doi.org/10.1023/A:1009281823488</a> <a href="https://doi.org/10.2307/2438317">https://doi.org/10.2307/2438317</a> <a href="https://doi.org/10.1111/j.1601-5223.1979.tb01659.x">https://doi.org/10.1111/j.1601-5223.1979.tb01659.x</a> <a href="https://doi.org/10.1385/0-89603-289-2:335">https://doi.org/10.1385/0-89603-289-2:335</a> <a href="https://doi.org/10.1016/0009-2797(81)90105-8">https://doi.org/10.1016/0009-2797(81)90105-8</a>
"centromere elongation"	12	1	<a href="https://doi.org/10.1016/0014-2964(79)90139-7">https://doi.org/10.1016/0014-2964(79)90139-7</a>
"centromere expansion"	187	10	<a href="https://doi.org/10.1371/journal.pgen.1002777">https://doi.org/10.1371/journal.pgen.1002777</a> <a href="https://doi.org/10.1038/43607">https://doi.org/10.1038/43607</a> <a href="https://doi.org/10.3390/ijms21103488">https://doi.org/10.3390/ijms21103488</a> <a href="https://doi.org/10.1007/s00412-022-00770-7">https://doi.org/10.1007/s00412-022-00770-7</a> <a href="https://doi.org/10.1093/molbev/msv070">https://doi.org/10.1093/molbev/msv070</a> <a href="https://doi.org/10.1007/s10577-016-9536-6">https://doi.org/10.1007/s10577-016-9536-6</a> <a href="https://doi.org/10.1186/s12862-018-1247-5">https://doi.org/10.1186/s12862-018-1247-5</a> <a href="https://doi.org/10.1007/s00122-022-04127-7">https://doi.org/10.1007/s00122-022-04127-7</a> <a href="https://doi.org/10.1038/43611">https://doi.org/10.1038/43611</a> <a href="https://doi.org/10.1371/journal.pgen.1010633">https://doi.org/10.1371/journal.pgen.1010633</a>