



Ministère de l'Enseignement Supérieur et de la Recherche Scientifique

Université des Frères Mentouri-Constantine 1

Faculté des Sciences Exactes

Département de chimie



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1- Publications internationales (2017-2020)

1. M. Belhadj Mostefa, A. Abedini, L. Voutquenne-Nazabadioko, S. C. Gangloff, A. Kabouche, Z. Kabouche. Abietane diterpenes from the cones of *Abies numidica* de Lannoy ex Carrière (Pinaceae) and *in vitro* evaluation of their antimicrobial properties. *Natural Products Research* (2017), 31(5), 568-571. <http://dx.doi.org/10.1080/14786419.2016.1190723>
2. W. Tadrent, A. Alabdul Magid, A. Kabouche, D. Harakat, L. Voutquenne-Nazabadioko, Z. Kabouche. A new sulfonylated flavonoid and other bioactive compounds isolated from the aerial parts of *Cotula anthemoides* L. *Natural Product Research* (2017), 31(12), 1437-1445. <http://dx.doi.org/10.1080/14786419.2016.1261342>
3. M. Ferhat, E. Erol, K. A. Beldjila, Y. Çetintaş, M. E. Duru, M. Öztürk, A. Kabouche, Z. Kabouche. Antioxidant, anticholinesterase and antibacterial activities of *Stachys guyoniana* and *Mentha aquatica*. *Pharmaceutical Biology* (2017), 55(1), 324-329. <https://doi.org/10.1080/13880209.2016.1238488>
4. H. Ghorab, A. Khettaf, M. Lehbili, A. Kabouche, A. Alabdul Magid, D. Harakat, L. Voutquenne-Nazabadioko, Z. Kabouche. A New Cardenolide and Other Compounds from *Salsola tetragona* Delile (Amaranthaceae). *Natural Product Communication* (2017), 12(1), 3-5.
5. H. Daroui-Mokaddem, A. Kabouche, N. Boutaghane, C-A. Calliste, J-L. Duroux, Z. Kabouche. Antioxidant Flavonoids from *Asteriscus maritimus*. *Natural Product Communication* (2017), 12(3), 385-386.
6. Y. El Ouadi, A. Beladjila, A. Bouyanzer, Z. Kabouche, H. Bendaif, F. Youssfi, M. Berrabah, R. Touzani, A. Chetouani, B. Hammouti. The Palm oil from seed of *Phoenix dactylifera* (Oil of both Deglet Nour and Kentichi) as a natural antioxidants and environment-friendly inhibitors on the corrosion of mild Steel in HCl 1M. *Moroccan Journal of Chemistry* (2017), 5(1), 139-152.
7. M. Ferhat, Z. Kabouche, Y. Fujimoto, H. Araya,. Two new triterpenes and other compounds from *Mentha aquatica* L. (Lamiaceae). *Natural Product Communication* (2017), 12(4), 324-329.
8. S. Bechkri, D. Berrehal, Z. Semra, K. Bachari, A. Kabouche, Z. Kabouche. Composition and biological activities of seeds oils of two *Crataegus* species growing in Algeria. *Journal of Material and Environmental Science* (2017), 8(3), 1023-1028.

9. M. Belhadj Mostefa, A. Abedini, S. C. Gangloff, A. Kabouche, Z. Kabouche. [A new \$\delta\$ -tocotrienolic acid derivative and other constituents from the cones of *Cedrus atlantica* and their *in vitro* antimicrobial activity](https://doi.org/10.1016/j.phytol.2017.05.009). *Phytochemistry Letters* (2017), 20, 252-258. <https://doi.org/10.1016/j.phytol.2017.05.009>
10. I. Labeled-Zouad, M. Ferhat, M. Ozturk, Ismail Abaza, S. Nadeem, A. Kabouche, Z. Kabouche. [Essential Oils Composition, Anticholinesterase and Antioxidant Activities of *Pistacia atlantica* Desf.](#) *Records of Natural Products* (2017), 11, 411-415.
11. A. Benmerache, A. Alabdul Magid, A. Labeled, A. Kabouche, L.Voutquenne-Nazabadioko, J. Hubert, H. Morjani, Z. Kabouche. Isolation and characterization of cytotoxic compounds from *Euphorbia clementei* Boiss. *Natural Product Research* (2017), 31(18), 2091-2098. DOI: [10.1080/14786419.2016.1277345](https://doi.org/10.1080/14786419.2016.1277345)
12. M. Lehbili, A. Alabdul Magid, A. Kabouche, L. Voutquenne-Nazabadioko, A. Abedini, H. Morjani, T. Sarazin, S. C. Gangloff, Z. Kabouche. Oleanane-type triterpene saponins from *Calendula stellata*. *Phytochemistry* (2017), 144, 33-42. <http://dx.doi.org/10.1016/j.phytochem.2017.08.015>
13. A. Benmerache, M. Benteldjoune, A. AlabdulMagid, A. Abedini, D. Berrehal, A. Kabouche, S. C. Gangloff, L. Voutquenne-Nazabadioko, Z. Kabouche. Chemical composition, antioxidant and antibacterial activities of *Tamarix balansae* J. Gay aerial parts. *Natural Product Research* (2017), (2017), 31(24), 2828-2835. <https://dx.doi.org/10.1080/14786419.2017.1299729>
14. A. Khalfallah, D. Berrehal, C. Bensouici, A. Kabouche, Z. Semra, L. Voutquenne-Nazabadioko, A. Alabdul Magid, Z. Kabouche. Flavonoids, cytotoxic, antioxidant and antibacterial activities of *Evax pygmaea*. *Pharmaceutical Biology* (2017), 55(1), 2292-2296. <https://doi.org/10.1080/13880209.2017.1405997>
15. A. Zeghib, A. Kabouche, S. Laggoune, C. A. Calliste, A. Simon, P. Bressolier, M. Aouni, J. L. Duroux, Z. Kabouche. Antibacterial, Antiviral, Antioxidant and Antiproliferative activities of *Thymus guyonii* Essential Oil. *Natural Product Communication* (2017), 12(10), 1651-1654.
16. R. Babouri, L. Clarion, M. Rolland, A. Van der Lee, Z. Kabouche, J.-N.Volle, D. Virieux, J.-L. Pirat. Synthesis of oxaphosphinane-based pseudodisaccharide. *European Journal of Organic Chemistry* (2017), 5357-5369. <https://doi.org/10.1002/ejoc.201700878>
17. M. K. Abderrezak, Z. Kabouche, C. Bruneau, C. Fischmeister. Ene-yne cross-metathesis for the preparation of 2,3-diaryl-1,3-dienes. *Catalysts* (2017), 7(12), 365-373. DOI: [10.3390/catal7120365](https://doi.org/10.3390/catal7120365)
18. K. Beroual, A. Agabou, M.C. Abeldjelil, N. Boutaghane, S. Haouam, Y. Hamdi Pacha. Evaluation of crude flaxseed (*Linum usitatissimum* L.) oil in burn wound healing in New Zealand rabbits. *African journal of traditional, complementary, and alternative medicines* (2017),

19. H. Ghorab, C. Lammi, A. Arnoldi, Z. Kabouche, G. Aiello. Proteomic analysis of sweet algerian apricot kernels (*Prunus armeniaca* L.) by combinatorial peptide ligand libraries and LC–MS/MS. *Food Chemistry* (2018), 239, 935-945. <http://dx.doi.org/10.1016/j.foodchem.2017.07.054>.
20. M. Lehbili, A. AlabdulMagid, J. Hubert, A. Kabouche, L. Voutquenne-Nazabadioko, J.-H. Renault, J.-M. Nuzillard, H. Morjani, A. Abedini, S. C. Gangloff, Z. Kabouche. Two new bis-iridoids isolated from *Scabiosa stellata* and their antibacterial, antioxidant, anti-tyrosinase and cytotoxic activities. *Fitoterapia* (2018), 125, 41-48. <https://doi.org/10.1016/j.fitote.2017.12.018>
21. H. Cherchar, M. Lehbili, D. Berrehal, H. Morjani, A. Alabdul Magid, L. Voutquenne-Nazabadioko, A. Kabouche, Z. Kabouche. A new 2-alkylhydroquinone glucoside from *Phagnalon saxatile* (L.) Cass. *Natural Product Research* (2018), 32(9), 1010-1016. <https://doi.org/10.1080/14786419.2017.1375918>
22. M. Lehbili, A. AlabdulMagid, A. Kabouche, L. Voutquenne-Nazabadioko, H. Morjani, D. Harakat, Z. Kabouche. Triterpenoid saponins from *Scabiosa stellate* collected in North-eastern Algeria. *Phytochemistry* (2018), 150, 40-49. <https://doi.org/10.1016/j.phytochem.2018.03.005>
23. A. Bouratoua, A. Khalfallah, C. Bensouici, Z. Kabouche, A. Alabdul Magid, D. Harakat, L. Voutquenne-Nazabadioko, A. Kabouche. Chemical composition and antioxidant activity of aerial parts of *Ferula longipes* Coss. ex Bonnier & Maury. *Natural Product Research* (2018), 32(16), 1873-1880. <https://doi.org/10.1080/14786419.2017.1353513>
24. K. A. Beladjila, R. Cotugno, D. Berrehal, Z. Kabouche, N. De Tommasi, A. Braca, M. De Leo. Cytotoxic triterpenes from *Salvia buchananii* roots. *Natural Product Research* (2018), 32(17), 2025-2030. <https://doi.org/10.1080/14786419.2017.1365072>
25. M. Lehbili, A. AlabdulMagid, A. Kabouche, L. Voutquenne-Nazabadioko, A. Abedini, H. Morjani, S. C. Gangloff, Z. Kabouche. Antibacterial, antioxidant and cytotoxic activities of triterpenes and flavonoids from the aerial parts of *Salvia barrelieri* Etl. *Natural Product Research* (2018), 32(22), 2683-2691. <https://doi.org/10.1080/14786419.2017.1378207>
26. K. A. Beladjila, D. Berrehal, A. Al-Aboudi, Z. Semra, H. Al-Jaber, K. Bachari, Z. Kabouche. Composition and antioxidant, anticholinesterase, and antibacterial activities of the essential oil of *Salvia buchananii* from Algeria. *Chemistry of Natural Compounds* (2018), 3, 1-2. DOI 10.1007/s10600-018-2414-z
27. K. A. Beladjila, D. Berrehal, N. De Tommasi, A. Braca, M. De Leo. Phenoloid Glycosides from *Cistanche phelypaea* and their activity as

- inhibitors of monoacylglycerol lipase (MAGL). *Planta Medica* (2018), 84(9-10), 710-715. DOI <https://doi.org/10.1055/s-0044-100187>
28. N. Boutaghane, A. AlabdulMagid, A. Abedini, A. Cafolla, H. Djeghim, S.C. Gangloff, L. Voutquenne-Nazabadioko, Z. Kabouche. Chemical constituents of *Genista numidica* Spach aerial parts and their antimicrobial, antioxidant and antityrosinase activities. *Natural Product Research* (2019), 33(2), 1734-1740. <https://doi.org/10.1080/14786419.2018.1437425>
29. K. A. Beladjila D. Berrehal Z. Kabouche M. P. Germanò, V. D'Angelo, N. De Tommasi, F. D'Andrea A. Bracca, M. De Leo. Antiangiogenic Activity of Compounds Isolated from *Anarrhinum pedatum*. *Journal of Natural Products* (2019), 82(3), 510-519. DOI: [10.1021/acs.jnatprod.8b00893](https://doi.org/10.1021/acs.jnatprod.8b00893)
30. M. Benteldjoune, M. G. Chini, A. M. Iannuzzi, A. Kabouche, Z. Kabouche, M. D'Ambola, S. Marzocco, G. Autore, G. Bifulco, N. De Tommasi. Guaianolides from *Ormenis mixta*: Structural Insights and Evaluation of Their Anti-inflammatory Profile. *Planta Medica* (2019), 85(11/12), 947-956. DOI: [10.1055/a-0941-0364](https://doi.org/10.1055/a-0941-0364)
31. M. Nassar, S. Zerizer, Z. Kabouche. M. Curro, D. Caccamo, R. Ientilez. *In vitro* study of cytotoxic and dna-protective effects of *Thymus guyonii* extract. *Pharmacologyonline* (2019), 2, 12-23. <http://pharmacologyonline.silae.it>
32. S. Bechkri, A. Alabdul Magid, L. Voutquenne-Nazabadioko, D. Berrehal, A. Kabouche, M. Lehibili, H. Lakhal, A. Abedini, S. C. Gangloff, H. Morjani, Z. Kabouche. Triterpenes from *Salvia argentea* var. *aurasiaca* and their antibacterial and cytotoxic activities. *Fitoterapia* (2019), 139, 104296. <https://doi.org/10.1016/j.fitote.2019.104296>
33. A. Zeghib, C.-A. Calliste, A. Simon, R. Charfeddine, M. Aouni, J.-L. Duroux, A. Kabouche, Z. Kabouche. Chemical composition and biological potential of *Thymus wilddenowii* Boiss. & Reut. essential oil. *Natural Product Research* (2019), 1-4, <https://doi.org/10.1080/14786419.2019.1602830>.
34. M. Benteldjoune, T. Boudiar, A. Bakhouch, M. del Mar Contreras, J. Lozano-Sánchez, C. Bensouici, Z. Kabouche, A. Segura-Carretero. Antioxidant activity and characterization of flavonoids and phenolic acids of *Ammoides atlantica* by RP-UHPLC-ESI-QTOF-MSⁿ. *Natural Product Research* (2019), 1-4, <https://doi.org/10.1080/14786419.2019.1619722>
35. A. Benmerache, A. Alabdul Magid, A. Kabouche, D. Harakat, L. Voutquenne-Nazabadioko, **Z. Kabouche**. 6'''-O-acetylisopinosin, a new C-glycosylflavone and known compounds from the aerial parts of *Cladanthus mixtus*. *Natural Product Research* (2020), 34(20), 2887-2893 <https://doi.org/10.1080/14786419.2019.1596100>
36. S. Bechkri, A. Alabdul Magid, C. Sayagh, D. Berrehal, D. Harakat, L. Voutquenne-Nazabadioko, **Z. Kabouche**, A. Kabouche. Triterpene

saponins from *Silene gallica* collected in North-Eastern Algeria. *Phytochemistry* (2020), 172, 112274.

<https://doi.org/10.1016/j.phytochem.2020.112274>

37. W. Slimani, S. Zerizer, Z. Kabouche. Immunomodulatory and Anti-Arthritic Activities of *Stachys circinata*. *Jordan Journal of Biological Sciences* (2020), 13(2), 183-189.
38. S. Bendamene, N. Boutaghane, Y. Bellik, C. Sayagh, A. Alabdul Magid^c, D. Harakat, Z. Kabouche, L. Voutquenne-Nazabadioko. Semipapposides A-M, triterpenoid bidesmosides saponins from the roots of *Scabiosa semipapposa*. *Phytochemistry* (2020), 180, 112526. <https://doi.org/10.1016/j.phytochem.2020.112526>
39. A. Marir, T. N. Mouas, B. Anak, E. Jeanneau, A. Djedouani, L. Aribi-Zouiouèche, F. Rabilloud. Cobalt(II), Nickel(II) and Zinc(II) complexes based on DHA: Synthesis, X-ray crystal structure, antibacterial activity and DFT computational studies. *Journal of Molecular Structure* (2020). 128353. [doi:10.1016/j.molstruc.2020.128353](https://doi.org/10.1016/j.molstruc.2020.128353)
40. C. Chiter, A. Bouchama, T. N. Mouas, H. Allal, M. Yahiaoui, I. Warad, A. Djedouani. Synthesis, crystal structure, spectroscopic and hirshfeld surface analysis, NCI-RDG, DFT computations and antibacterial activity of new asymmetrical azines. *Journal of Molecular Structure* (2020). 128376. [doi:10.1016/j.molstruc.2020.128376](https://doi.org/10.1016/j.molstruc.2020.128376)