

Penitrem A

Peer-Reviewed Journal Articles

Literature Review by Lisa Petrisson, Ph.D.

Neurotoxic Effects:

Berntsen H. F., Wigestrands M. B., Bogen I. L., Fonnum F., Walaas S. I., Moldes-Anaya A.. Mechanisms of penitrem-induced cerebellar granule neuron death in vitro: possible involvement of GABAA receptors and oxidative processes. *Neurotoxicology*. 2013;35:129–136.

Moldes-Anaya Angel, Rundberget Thomas, Fæste Christiane K., Eriksen Gunnar S., Bernhoft Aksel. Neurotoxicity of *Penicillium crustosum* secondary metabolites: tremorgenic activity of orally administered penitrem A and thomitrem A and E in mice. *Toxicol*. 2012;60:1428–1435.

Moldes-Anaya Angel S., Fonnum Frode, Eriksen Gunnar S., Rundberget Thomas, Walaas S. Ivar, Wigestrands Mattis B.. In vitro neuropharmacological evaluation of penitrem-induced tremorgenic syndromes: importance of the GABAergic system. *Neurochemistry international*. 2011;59:1074–1081.

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Aoki T., Baraban S. C.. Properties of a calcium-activated K(+) current on interneurons in the developing rat hippocampus. *Journal of neurophysiology*. 2000;83:3453–3461.

Hayes A. W., Hood R. D.. Effects of prenatal administration of penicillic acid and penitrem A to mice. *Toxicon*. 1978;16:92–96.

Hayes A. W., Phillips R. D., Wallace L. C.. Effect of penitrem A on mouse liver composition. *Toxicon*. 1977;15:293–300.

Cardiovascular Effects:

Asano Shinichi, Bratz Ian N., Berwick Zachary C., Fancher Ibra S., Tune Johnathan D., Dick Gregory M.. Penitrem A as a tool for understanding the role of large conductance Ca(2+)/voltage-sensitive K(+) channels in vascular function. *The Journal of pharmacology and experimental therapeutics*. 2012;342:453–460.

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Liver and Kidney Effects

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Cytotoxicity

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Colonization

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Presence in Biowaste

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Presence in Food:

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Use as Insecticide

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Mold Classification

Boysen M., Skouboe P., Frisvad J., Rossen L.. Reclassification of the *Penicillium roqueforti* group into three species on the basis of molecular genetic and biochemical profiles. *Microbiology (Reading, England)*. 1996;142 (Pt 3):541–549.



Paradigm Change

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Frisvad J. C.. Physiological criteria and mycotoxin production as AIDS in identification of common asymmetric penicillia. *Applied and environmental microbiology*. 1981;41:568–579.

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