

## Publicationlist Willi A Ribí, 1974- 201x

Bhavana Penmetcha, Yuri Ogawa, **Willi A. Ribí**, Ajay Narendra (2019) Ocellar structure in African and Australian desert ants. *J.comp Physiol A*, 205(5),699-706. Doi.10.1007/s00359-019-01357-x

**Ribí W**, Zeil, J. (2018) Diversity and common themes in the organization of ocelli in Hymenoptera, Odonata and Diptera. *J comp Physiol A*. 204(5):505-517

Ajay Narendra, **Willi A Ribí** (2017d) Ocellar structure is driven by the mode of locomotion and activity time in *Myrmecia* ants. *J Exp Biol*. 2017 Dec 1;220(Pt 23):4383-4390. doi: 10.1242/jeb.159392.

Ramirez-Esquivel, F., **Ribí, W. A.**, Narendra, (2017c) A. Techniques for Investigating the Anatomy of the Ant Visual System. *J. Vis. Exp.* (), e56339, doi:10.3791/56339 (2017).

**Ribí W**, Zeil, J. (2017b) Three-dimensional visualization of ocellar interneurons of the orchid bee *Euglossum imperialis* using micro X-ray computed tomography. *J Comp Neurol*. 2017; 00:11-15. <https://doi.org/10.1002/ce.24260>

Yuri Ogawa, **Willi Ribí**, Jochen Zeil, and Jan M Hemmi (2017a) Regional differences in the preferred e-vector orientation of honeybee ocellar photoreceptors JEXBIO/2017/156109

Ajay Narendra, Birgit Greiner, **Willi A Ribí**, Jochen Zeil (2016c) Light and dark adaptation mechanisms in the compound eyes of *Myrmecia* ants that occupy discrete temporal niches. *J. Exp. Biol.* 219, 2435-2442 [10.1242/jeb.142018](https://doi.org/10.1242/jeb.142018).

Gavin Taylor, **Willi A. Ribí**, Martin Bech, Andrew J. Bodey, Christoph Rau, Axel Steuwer, Eric J. Warrant, Emily Baird (2016b) The dual function of orchid bee ocelli as revealed by x-ray microtomography.

Ajay Narendra, Fiorella Ramirez-Esquivel, **Willi A. Ribí** (2016a) Compound eye and ocellar structure for walking and flying modes of locomotion in the Australian ant, *Camponotus consobrinus*. *Nature, Scientific Reports* 6:22331

**Willi A. Ribí**, Jochen Zeil (2015b) The visual system of the Australian "Redeye" Cicada (*Psaltoda moerens*) *Arthropod Struct Dev.*;44(6 Pt A):574-86

Anna L. Stöckl, **Willi A. Ribí**, Eric J. Warrant (2015a) Adaptations for nocturnal and diurnal vision in the Hawkmoth lamina. *J. comp. Physiol. Neurol.* 2016, 524, 1, 160–175

Huixia Zhao, Nenggan Zheng, **Willi A. Ribí**, Huoqing Zheng, Lei Xue, Fan Gong, Xiaoxiang Zheng, Fuliang Hu (2014b) Neuromechanism Study of Insect-Maschine Interface: Flight Control by neural Electrical Stimulation. *PLoS One* vol.9/11 e1130012

Zeil J, **Ribí WA**, Narendra A (2014a) Polarisation Vision in Ants, Bees and Wasps In: G. Horvath (ed.) *Polarization Vision in Animal Sciences*, Springer Series in Vision Research, Springer Verlag Berlin Heidelberg

Narendra A, Alkaladi A, Raderschall CA, Robson SKA, **Ribi WA**, (2013) Compound eye adaptations for diurnal and nocturnal lifestyle in the intertidal ant, *Polyrhachis sokolova*. PLoS One vol.8/10 e76015

**Ribi WA**, Warrant EJ, Zeil J (2011b) The organization of honeybee ocelli: Regional specializations and rhabdom arrangements. *Arthropod Structure & Development* 40: 509-520

Narendra A, Reid SF, Greiner B, Peters RA, Hemmi JM, **Ribi WA**, Zeil J (2011a) Caste-specific visual adaptations to distinct daily activity schedules in Australian *Myrmecia* ants. *Proceedings of the Royal Society B* 278: 1141-1149

Narendra A, Reid SF, Greiner B, Peters RA, Hemmi JM, **Ribi W**, Zeil J (2010) Caste-specific visual adaptations to distinct daily activity schedules in Australian *Myrmecia* ants. *Proc. R. Soc. B* 2010.1378.

**Ribi W**, Senden TJ, Sakellariou A, Limaye A, Zhang S (2008). Imaging honey bee brain anatomy with micro-X-ray-computed tomography. *J. Neurosci. Methods*; 171: 93-96.

Greiner Birgit; Narendra Ajay; Reid Samuel F; Dacke Marie; **Ribi Willi A**; Zeil Jochen (2007b). Eye structure correlates with distinct foraging-bout timing in primitive ants. *Current Biology*:17(20):R879-80.

Greiner B, Cronin WC, **Ribi WA**, Wcislo WT, Warrant EJ. (2007a). Anatomical and physiological evidence for polarisation vision in the nocturnal bee *Megalopta genalis*. *Journal of comparative physiology. A, Neuroethology, sensory, neural, and behavioral physiology*;193(6):591-600.

Letzkus P, **Ribi WA**, Wood JT, Zhu H, Zhang SW, Srinivasan MV (2006) Lateralization of olfactory learning in the honeybee *Apis mellifera*. *Current Biology* 16:1471-1476

Greiner B, **Ribi WA**, Theobald JC, Wcislo WT, Warrant EJ (2005c) A neural network to improve dim-light vision? Dendritic fields of first-order interneurons in the nocturnal bee *Megalopta genalis*. *Cell Tissue Res* 322(2):313-20

Greiner B, **Ribi WA**, Warrant EJ (2005b) A neural network to improve dim-light vision? Dendritic fields of first-order interneurons in the nocturnal *Megalopta genalis*. *Cell Tissue Res* 318:429-437

Greiner B, **Ribi WA**, Cronin TW, Wcislo WT, Warrant EJ (2005a) Polarisation vision in a nocturnal bee. 30th Göttingen Neurobiology Conference/ Sixth meeting of the German Neuroscience Society, 17-20 February 2005

Greiner B, **Ribi WA**, Warrant EJ (2004d) Neuronal branching pattern in the first optic ganglion of the nocturnal bee *Megalopta genalis*. *Cell Tissue Res* 318:429-437

Warrant EJ, Kelber A, Gislen A, Greiner B, **Ribi WA**, Wcislo W (2004c) Nocturnal vision and landmark orientation in a tropical halictid bee. *Current Biology*, 14:1309-1318

Greiner B, **Ribi WA**, Warrant EJ (2004b) Optical and neural adaptations for nocturnal vision in a tropical halictid bee. 7th International congress of neuroethology. Nyborg,

Danmark, 8-13. August 2004

Greiner B, **Ribi WA**, Warrant EJ (2004a) Retinal and optical adaptations for nocturnal vision in the halictid bee *Megalopta genalis*. *Cell Tissue Res* 316:377-390

**Ribi WA**, Engels E, Engels W (1989) Sex and caste specific eye structures in stingless bees and honey bees (Hymenoptera :Trigonidae, Apidae). *Ent. Gen.*, 14, 233-242

**Ribi WA**, (1987b) The structural basis of information processing in the visual system of the bee. In: Menzel R and Mercer A (eds) 1987: *Neurobiology and Behaviour of Honeybees*, Springer, Berlin Heidelberg New York

**Ribi WA** (1987a) Anatomical identification of spectral receptor types in the retina and lamina of the Australian orchard butterfly *Papilio aegus aegus* D. *Cell Tissue Res* 247, 393-407

**Ribi WA** (1985a) The first optic ganglion of the bee. VI. A sexual dimorphic receptor cell axon. *Cell Tissue Res* 240, 27-33

Lall AB, Strother GK, **Ribi WA**, Seliger HH, Chapados P. Lloyd JE (1984 b) In situ MSP measurements of screening pigments in rhabdomeric slices and their effects of screening pigments in sensitivity in twilight active fireflies. In: *Association for Res in Vision and Ophthalmology*, Florida

**Ribi WA** (1984a) The first optic ganglion of the bee. V. Structural and functional characterisation of centrifugally arranged interneurons. *Cell Tissue Res* 236, 577-584

**Ribi WA** (1983) Combined Golgi and electron microscopy techniques. In: Miller TA (ed.) *Experimental Entomology. Vol II: Neuroanatomical Techniques*. Springer, Berlin Heidelberg New York pp 1-18

**Ribi WA** (1982) Insekten an der Grenze zwischen Luft und Wasser. *Tetra* 2, 2-5

Hardie R, Franceschini N, **Ribi WA**, Kirschfeld K (1981g) Distribution and properties of sex-specific photoreceptors in the fly *Musca domestica*. *J. Comp Physiol* 145, 139-152

**Ribi WA**, Scheel M (1981f) The second and third optic ganglia of the worker bee: Golgi studies of the neuronal elements in the medulla and lobula.. *Cell Tissue Res* 221, 17-43

Franceschini, N, Hardie R, **Ribi WA** (1981e) Sexual dimorphism in a photoreceptor. *Nature* 291, 241-244

**Ribi WA** (1981d) Wie atmen Vogeleier: Gasaustausch zwischen Embryo und Aussenwelt. *NZZ. Forschung und Technik* 88, 63

**Ribi WA** (1981c) Brutpflege und soziale Evolution bei Insekten. *NZZ, Forschung und Technik*, 40, 55

**Ribi WA** (1981b) The phenomenon of eye glow. *Endeavour* 5, 2-8

**Ribi WA** 1981a) The first optic ganglion of the bee. IV. Synaptic fine structure and

connectivity patterns of receptor cell axons and first order interneurons. Cell Tissue Res 215, 443-464

**Ribi WA** (1980h) Die Wasseroberfläche, ein Biotop für Insekten. NZZ, Forschung und Technik 240,73

**Ribi WA** (1980g) Eine strukturelle Betrachtung des Insektenauges am Beispiel der Grabwespe *Sphex cognatus*. Mikrokosmos 10, 325-327

**Ribi WA** (1980f) A simple and rapid Golgi-EM-procedure. Neuroscience letters Suppl 5, 198

Hausen K, Wolburg-Buchholz K, **Ribi WA** (1980e) The synaptic organization of visual interneurons in the lobula complex of flies. A light and electron microscopical study using silver-intensified cobalt-impregnations. Cell Tissue Res 208, 371-387

**Ribi WA** (1980d) Kombinierte LM-EM-Methode zur Untersuchung von pre- und postsynaptischen Verbindungen in silbermarkierten Neuronen. Verh Deutsch Zool Ges 1980, Gustav Fischer Verlag Stuttgart pp36

**Ribi WA** (1980c) New aspect of polarized light detection in the bee in view of non-twisted rhabdomeric structures. J Comp Physiol 137, 281-285

Van Praagh JP, **Ribi WA**, Wehrhahn C, Wittmann D (1980b) Drone bee fixate the queen with the dorsal frontal part of the their compound eyes. J Comp Physiol 136, 263-266

**Ribi WA**, Berg G (1980a) Light and electron microscopic structure of Golgi- stained neurons in the vertebrate brain (new rapid Golgi procedure). Cell Tissue Res 205, 1-10

**Ribi WA** (1979f) Do the rhabdomeric structures in bees and flies really twist? J Comp Physiol 134, 109-112

**Ribi WA** (1979e) Information processing in the first optic ganglion of the bee. Neuroscience letters Suppl 3, 61

**Ribi WA** (1979d) The first optic ganglion of the bee. III. Regional comparison of the morphology of photoreceptor-cell axons. Cell Tissue Res 200, 345-357

**Ribi WA** (1979c) Coloured screening pigments cause red eye glow hue in the Pierid butterflies. J Comp Physiol 132, 1-9

**Ribi WA** (1979b) Structural differences in the tracheal tapetum of diurnal butterflies. Z Naturforsch 34c, 284-287

**Ribi WA**, Ribi L (1979a) Natural history of the Australian digger wasp *Sphex cognatus* Smith (hymenoptera, Sphecidae). J Nat History 13, 693-701

**Ribi WA** (1978d) Colour receptors in the eye of the digger wasp *Sphex cognatus* Smith: Evaluation by selective adaptation. Cell Tissue Res 195, 471-483

**Ribi WA** (1978c) Gap junctions coupling photoreceptor axons in the first optic ganglion of the fly. Cell Tissue Res 195, 299-308

**Ribi WA** (1978b) A unique hymenopteran compound eye. The retina fine structure of the digger wasp *Sphex cognatus* Smith (Hymenoptera, Sphecidae) Zool. Jb Anat 100, 199-342

**Ribi WA** (1978a) Ultrastructure and migration of screening pigments in the Retina of *Pieris rapae* L. (Lepidoptera, Pieridae) Cell Tissue Res 191, 57-73

Stowe S, **Ribi WA**, Sandeman DG (1977b) The organisation of the lamina ganglionaris of the crabs *Scylla serrata* and *Leptograpsus variegatus*. Cell Tissue Res 178, 517-532

**Ribi WA** (1977a) Fine structure of the first optic ganglion (lamina) of the cockroach, *Periplaneta Americana*. Tissue & Cell 9, 57-72

**Ribi WA** (1976b) The first optic ganglion of the bee. II. Topographical relationships of the monopolar cells within and between cartridges. Cell Tissue Res 171, 359-373

**Ribi WA** (1976a) A Golgi-electron microscope method for insect nervous system. Stain Technol 51, 13-16

**Ribi WA** (1975f) The first optic ganglion of the bee I. Correlation between visual cell types and their terminals in the lamina and medulla. Cell Tissue Res 165, 103-111

**Ribi WA** (1975e) The organisation of the lamina ganglionaris of the bee. Z Naturforsch 30c, 851-852

**Ribi WA** (1975d) The anatomical basis for information processing in the bee eye. Proc Aust Physiol & Pharmacol Soc 6

**Ribi WA** (1975c) The structure and connectivity patterns of the neurons of the first optic ganglion of the bee. *Apis mellifera*. Proc Aust Physiol & Pharmacol Soc 5

**Ribi WA** (1975b) Golgi studies of the first optic ganglion of the ant *Cataglyphis bicolor*. Cell Tissue Res 160, 207-217

**Ribi WA** (1975a) The neurons of the first optic ganglion of the bee *Apis mellifera*. Advances in Anatomy 50, 4, 1-43 Springer Heidelberg

**Ribi WA** (1974b) The structure and connectivity patterns of the neurons of the first optic ganglion of the bee *Apis mellifera*. PhD University Zurich

**Ribi WA** (1974a) Neurons in the first synaptic region of the bee, *Apis mellifera*. Cell Tissue Res 148, 277-286