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## A NEW SPECIES OF ECCOPTOGASTER. BY J. M. SWAine, macdonald College, P. Q.

The beetle here described is interesting as being the first species of its genus recorded from conifers in eastern North America. In the west $E$. unispinosus occurs in Pseudotsuga, and possibly in Larix, and E. sub. saaber and E. preceeps occur in Abies. The food-plants of $E$. ventralis and $E$. Californicus have not been recorded. Of the eastern species, $\boldsymbol{E}$. fagi is found in Celtis and Fagus, E. muticus in Celtis, E. quadrispinosus in Hicoria, and E. rugulosus in Prunus, Pyrus and Crategus. The foodplants of $E$. sulcatus have not been recorded.

The species was found at Hudson, Que., May 24th, 1909, in branches of Picea Canadensis. Full-grown larve and pupæ were abundant in the ends of the larval galleries, but adults had not then appeared. Adults emerged from sticks in the laboratory on June 6th, and egg-laying under natural conditions commened early in July in branches which had been broken by winter storms. No tunnels were found in living bark nor in limbs which I had girdled in May.

The egg-tunnels deeply score the wood lengthwise of the grain. The tunnels are divided into two portions by a nuptial chamber, situated usually near the middle, and from the nuptial chamber a short oblique tunne! leads to the entrance-hole above. From ten to thirty eggs are laid in shallow nitches along each side of the tunnel, and well packed in with fine bits of wood. The larval galleries arise from the tunnels in a fairly regular manner, but soon through their windings cross each other in every direction, but still show a general tendency to follow the grain of the wood, which they deeply score. The pupal cells at the ends of the galleries are more or less deeply sunk into the wood, and are usually parallel with the surface, though sometimes oblique.

This species is most closely allied to E. unispinosus, but is easily separated by the shape and position of the ventral spine. In unispinosus the spine is flattened in the male, and the base of the hind margin attains the caudal margin of the segment. The shape is roughly triangular,

