

the sulcus, with the accompanying long hairs, which in this species are directed caudo-mesad, with shorter sparse stiff hairs on the sides and ventral margin of the declivity; the apical margin narrowly rounded but not acuminate. The ventral surface is finely, not closely punctured, and finely pubescent; the last sternite is very deeply emarginate.

The male has the front flattened, semi-circularly margined behind, very strongly so across the middle; closely, deeply and roughly but not coarsely punctured; with a small median tubercle on the epistoma; rather closely pubescent with fine short hairs of equal length; the pronotum more distinctly constricted, with the sides straighter behind. The declivity has the granules and setæ somewhat coarser.

A long series from *Pinus contorta* of British Columbia Coast Region. The type series was collected by Mr. Tom Wilson at Adams Lake, B.C.

***Pityophthorus granulatus*, n. sp.**

This species is so closely allied to *nudus* that a detailed description is unnecessary. It differs from *nudus* chiefly in the usually more coarsely punctured pronotum and elytra, with the elytral interspaces transversely rugose, and the strongly, uniseriately granulate-setose suture and lateral convexities of the declivity. The secondary sexual characters appear to be the same as in *nudus*.

It is abundant in jack pine in Manitoba, and occurs in pine and balsam in Quebec province, and in Nova Scotia.

***Pityophthorus ramiperda*, n. sp.**

Description of adult.—The form is rather stout, $2\frac{1}{2}$ times as long as wide; with the pronotum strongly arcuate on the sides, and the declivity very steep and only slightly retuse; the length, 2.1mm.

The head has the front moderately convex, closely rather finely, deeply punctured, with a median carina on the cephalic half extending to the epistomal margin; the vertex smooth; the antennal club very large, short oval, the first two sutures faintly arcuate, the second before the middle, the third strongly arcuate, the first two segments short, subequal, the third and fourth equal in length and together longer than the first two united, sparsely pubescent with short erect hairs, the sutures not septate.

The pronotum is about as wide as long, more strongly arcuate behind than usual, the hind angles rounded, strongly arcuate on the sides, constricted before the middle and broadly rounded on the front margin, which is serrate with the median asperities longest; the summit slightly in front of the middle; the cephalic portion concentrically finely asperate; the caudal portion rather coarsely, subgranulately punctured, more finely near the lateral margin; with a strong well-defined median carina from the summit to the caudal margin, and the basal marginal line fine across the disc but distinct. The ventral surface of the prothorax is smooth and shining, with a few small punctures near the front margin.

The elytra are almost exactly twice as long as the pronotum, $75:39$; three-fifths as wide as long; about as wide as the pronotum, slightly wider at the middle; the base truncate; the sides faintly arcuate, subparallel for about four-fifths the length, then broadly rounded to the hind margin, which is sulcate-truncate as viewed from above; the suture elevated on the disc; the punctures in regular rows, the sutural striæ moderately impressed, the remaining discal striæ hardly impressed, the lateral striæ from the eighth outward deeply impressed, the ninth very deep and wide; the stria punctures regular, small deep and closely placed; the interspaces slightly transversely wrinkled, in places smooth and shining, rather finely, sparsely punctured, more coarsely and closely