# ON A NEW SPECIES OF PIPTOCHAETIUM FROM URUGUAY 

by

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Piptochaetium was described in the year 1830 by Presi as a monotypic genus; the only species was named and figured by him as Piptochaetium setifolium, an inhabitant of Peru. The genus has usually been included as a section in the genus Oryzopsis of Mi $\mathrm{chaux}_{\text {, and }}$, andious species were also published under the genus Stipa. In my monograph of the genus Aristida I had the opportunity to study the whole tribe of the Stipeae, and reasons are given there why Piptochaetium should be accepted.as a quite distinct genus. From the very good description given by Presl and from the accompanying plate, the genus is easily recognizable. In my monograph a key to the genera of the tribe of the Stipeae has been given. The genus Piptochaetium is limited to the new world. In North America and Mexico one species only is known, the Piptochaetium fimbriatum (H. B. K.) Hitchc. Since Presl's time a great many other species of this genus were recognized, especially by Philippi from Chile. These were but shortly described by Philippi and a better knowledge of them is obtainable only after the study of Philippi's type specimens. In the southern part of South America we find a group of Piptochaetium which is better known, because the types of the species of this group are better obtainable and have been sufficiently studied. A treatment of these species of Piptochaetium was given by Spegazzini in the year 1901 in his work on the "Stipeae platenses". In this work Spegazzini recognizes Stipa and Oryzopsis only, the latter being differentiated by its "palea coriacea, longitrorsum 2-nervosocarinata, inter carinas sulcata". This is the excellent generic character which was also exactly formulated by Presl when he described his genus Piptochaetium. In contradistinction to the latter the genus Oryzopsis has a quite different form of fruit, the lemma is never asymmetrical and the awn therefore not eccentrically attached; there are moreover important differences in epiblast and endosperm.


None of the species of Oryzopsis described or mentioned by Spegazzini belong to that genus. They all belong to the genus Piptochaetium and of this genus there are now in southern South America about 15 species known; 13 of them were dealt with by Spegazzini who divided them into 3 groups, to which he gave the names Piptochaetium (Presl), Piptatherum (P. B.) and Urachne (T rin.). These groups cannot be accepted, as the characters of the anthopodium which are given by Spegazzini to distinguish them, are by no means suitable, and moreover do not apply to the three genera as proposed by Presl, Trinius and Beauvois. There is but one species (Piptochaetium lasianthum Griseb.) where the lemma is hairy over its whole surface, with long hairs on the callus too. All the other species have lemmas which are perfectly destitute of hairs, although the true callus may be either hairy or glabrous. If we exclude the group with a long and sharp callus, we have a very homogeneous group of species with very characteristic lemmas and very obtuse callus. These lemmata are coriaceous, smooth, ribbed or tuberculate and together with the hairy or naked callus form good specific characters. A quite smooth lemma is found in Piptochaetium lejocarpum (Speg.) Hackel only, a quite naked callus and a striate lemma we find in the Piptochaetium lejopodum (S peg.) Henr. nov. comb. (=Oryzopsis lejopoda Speg.), whereas all the other members in southern South America have striate or partly tuberculate lemmata with a bearded callus. I

Fig. 1. Piptochaetium jubatum Henr., right: whole lemma taken from the glumes ( $8 \times$ ); left: lemma with removed hairs.
must remark here that this bearded callus has a ring of hairs, arising from the callus, so that if we cut away the callus the lemma is perfectly glabrous. The ring of callushairs is in all the species hitherto known rather short, scarcely reaching half the length of the lemma, sothat the upper part of the lemma is always quite visible.
Mr. Bernardo Rosengurtt from Montevideo has at various times communicated to me large quantities of grasses from Uruguay and asked my opinion about them. Among the beautiful and extensive material for which I express here my sincere thanks, there was a plant already indicated by him as very curious, a plant I will publish here as a new representative of the genus Piptochaetium. This Piptochaetium is in its general appearance very similar to the $P$. ovatum (Trin. et Rupr.) Desv. but at once distinguishable by the long hairs of the callus which surround the lemma, so that the whole surface of the lemma is nearly invisible and can be seen only by cutting away the callus or by removing the hairs with a needle.

I have given here a figure of the lemma with its long awn as it looks when it is taken from the glumes and of another lemma after the hairs of the callus have been removed to show the surface of the lemma. Because of these long hairs encircling the callus I will name this species:

Piptochaetium jubatum. Henr. nov. spec.
Perennis. Dense caespitosa, elegans. Culmi erecti, circa 30 cm longi, binodes; vaginae glabrae, folia basalia ad ro cm longa, setacea, sensim acuminata, complicata, crassiuscula, marginibus scaberulis. Inflorescentia spiciformis, angusta, erecta, circa $3-5 \mathrm{~cm}$ longa, depauperata, rami breves, erecto-appressi, pilosi, subunispiculati; spiculae sine aristis circa 3 mm longae, ovatae, glumae steriles subaequales, ovatae, acuminato-aristatae, inferne violaceae, superne albo-hyalinae, 3-5 nerviae, gluma sterilis 2 mm longa, ovata, coronula magna praedita, coriacea, valde striato-puncticulata, anthopodium breve annuliforme, pilis longissimis praeditum, pilae subrigidae, arista circa 18 mm longa, torta, scaberula, subgeniculata, palea bicarinata, inter carinas profunde sulcata.

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Typus speciei in Herb. Lugd. Bat. sub no. 938.280-383.

