

E. longifolium DECNE., l.c. 123 t. 129.

Eritricum rupestre BUNGE var. *pectinatum* BRAND in Pflanzenreich Heft 97: 192 p.p. (1931).—KITAMURA, Fl. Afgh. 315.

W. Pakistan, Karakoram: Paiju, near Baltro Glacier 3300 m (July 7, 1955 S. NAKAO)—Fr., Urdokas along Baltro Glacier (July 15, 1955 S. NAKAO)—Fl.

Distr. Afghanistan, W. Pakistan, Himalayas (from Kashmir to Nepal).

BRAND gathered many species, but the writer considers *E. canum* and *E. spathulatum* being specifically distinct from *E. rupestre* BUNGE. These groups are fairly geographically constant.

Macrotomia Oginoi KITAMURA sp. nov.

Species M. euchromon affinis a qua corollis longioribus (25 mm) foliis angustioribus divergit.

Perennis. Radix lignescens obliqua circ. 1 cm diametro intense purpurea, collo basibus foliorum anni praecedenti dense obtecto. Caulis caespitosus 25–33 cm altus erectus, simplex striatus 2–4 mm diametro, pilis rigidis patentibus sparse hirsutus, apice ad inflorescentiam ramosus. Folia radicalia, sub anthesi viva rosulata linearia 15–19 cm longa 4–5 mm lata apice acuta basi attenuata utrinque pilis 1–2 mm longis patentibus apice acutis basi discoideis modeste hirsuta, et pilis minutis glandulosis intermixta, caulina numerosa, media lanceolata 5.5–7 cm longa 7–10 (12) mm lata apice acuta basi sessilia utrinque modeste hirsuta, folia superiora approximativis disposita, oblongo-lanceolata 3.5–5 cm longa, ad inflorescentiam depauperata. Inflorescentia 5.5–6.5 cm diametro, bracteis lanceolato-linearibus 1.5–2 cm longis, pedicellis 4 mm longis, pilis flavo-brunnescentibus dense hirsutis. Calyx 13–16 mm longus 5-partitus, lobis linearibus acutis dense hirsutis. Corolla hypocrateriformis 25 mm longa, 15–17 mm lata, tubo 20 mm longo, extus sub lente pilis longis attenuatis et pilis glandulosis sparsim pilosa, intus sub lente pilis minutis crispis albis dense vestita, praecipue ad faucem. Stylus 21 mm longus, antherae 2.2 mm longae.

W. Pakistan, Swat Himalaya: Diwangar 3300 m (July 22, 1957 K. OGINO no. 91, 92)—long styled, —Typus no. 91 in Herb. Univ. Kyoto, between Diwangar and Pitchar 3500 m (July 23, 1957 K. OGINO no. 183), 3600 m (July 23, 1957 K. HONDA no. 226)—Short styled.

Distr. Endemic.

This is closely related to M. euchromon, and distinguished from it by the larger less hairy flowers and the narrower less hairy leaves.

Chrysanthemum karakoramense KITAMURA nom. nov.

Tanacetum artemisioides SCHULZ Bip. ex HOOKER f., Fl. Brit. Ind. II: 318 non Ch. artemisioides (LESS.) KITAMURA (1939).

W. Pakistan, Karakoram: Between Pakol and Imit (Sept. 16, 1956 K. HONDA).

Distr. Karakoram.

Scorzonera (§ Scaposae) fusca KITAMURA sp. nov.

A S. Codringtonii, involucro longiore, squamis angustioribus, interioribus fusco-tomentosis foliis angustioribus distinguenda.

Rhizoma perpendiculare crassum apice 1-pluricephalum 2–10 cm diametro, collo basibus foliorum fuscosquamoso obtecto, (non fibroso). Folia radicalia copiosa linearia 10–15 cm longa apice obtusa, medio 1.5–2 mm lata, utrinque cinereo-tomentosa, ascendentia. Caulis scaposus, sub anthesi 10–17 (20) cm altus gracilis 1.5 mm diametro, albo-tomentosus, foliis linearibus 2–4 sursum brevioribus praeditus, sub capitulo longe nudus. Involucrum sub anthesi 12–15 mm longum, in sicco 10–17 mm latum, squamae imbricatae, exteiiores oblongo-lanceolatae vel lanceolatae circ. 3 mm longae 1 mm latae apice acuminatae dorso albo-tomentosae, interiores lineares, medio 2–2.5 mm latae dorso pilis fuscis tomentosae secus costam tantum albotomentosae, apice obtusae. Ligulae in sicco flavo-purpurascetes 14–22, 14 mm longae, 2.5–3 mm latae, tubis 4.5 mm longis. Ovarium cylindricum glabrum. Pappus inferne plumosus superne scaber. Achenia immatura longitudinaliter costata, secus costam dense muricata.

W. Pakistan, Hindukush: Between Diwangar and Ghizar 3650 m on a gravelly cliff (July 25, 1957 K. HONDA no. 158)—Typus in Herb. Univ. Kyoto, 3700 m (July 25, 1957 K. OGINO no. 215), 3900 m (K. OGINO no. 216), Multan Balay Bar 3350 m (Aug. 10, 1957 K. OGINO no. 504).

Distr. Endemic.

Scorzonera (§ Intricatae) Hondae KITAMURA sp. nov.

A S. tortuosissima acheniis minoribus ad costam distinete muricatis distinguenda. A S. divaricata involuci squamis interioribus angustioribus, acheniis muricatis diversa.

Rhizoma ligunosa obliqua, collo ramoso non fibroso parce squamoso. Caulis 30 cm altus caespitosus e basi dichotome crebro-ramosus, adpresso tomentosus vel glaberratus, 1.5–2 mm diametro. Folia caulina inferiora linearia crassa 15–20 cm longa 1 mm lata apice obtusa, saepe recurva minute albo-pilosa vel glabrata, caulina superiora sursum gradatim minora, demum bracteiformia 1–2 mm longa, remota. Capitula longe pedunculata, pedunculis 2–7 cm longis, bracteatis, sub anthesi 10 mm diametro. Involucrum tubulosum adpresso albo-tomentosum sub anthesi 7–9 mm longum, squamae exteiiores ovato-lanceolatae 1.5–3 mm longae 1 mm latae acutae, interiores 5, oblongo-lineares apice obtusae, 11–9 mm longae 1–1.5 mm latae. In fructu, involucrum 10–11 mm longum, squamae interiores 1–1.7 mm latae. Flores 5–6, corolla flava 8 mm longa tubo 2 mm longo, minute piloso. Achenia alba cylindrica 7 mm longa 1 mm lata apice truncata, basi contracta, inaequaliter longitudinaliter costata, secus costam muricata. Pappus 12 mm longus, setis inaequilongis inferne plumosis superne scabris.

W. Pakistan, Karakoram: Between Gilgit and Nomal (Sept. 1956 K. HONDA)—Typus in Herb. Univ. Kyoto.

Distr. Endemic.

Tricholepis Nakaoi KITAMURA sp. nov.

T. elongata affinis a qua capitulis cernuis purpureis, pappis longioribus distinguenda.