

Family 105. CRUCIFERAE

Revision:

Jonsell, B. 1988. *Cruciferae*. Flora Malesiana series 1, 10: 541-560.

1. *Brassica* Linnaeus

Brassica juncea (L.) Czern., Consp. Pl. Chark. (1859) 8; --Merr., Fl. Manila (1912) 214; --Jonsell, Fl. Males. ser. 1, 10 (1988) 545; Fig. 1.

Brassica integrifolia (West) OE Schulz in Urban, Symb. Antill. 3 (1903) 509; --Merr., EPFP 2 (1923) 207.

Origin not known, possibly E Europe or SW Asia. Widespread in cultivation in S Europe, Asia, Africa, and America. Cultivated in the Philippines. Mustard; mustasa

Brassica oleracea L., Sp. Pl. 2 (1753) 667.

Acephala group (Kale)

Alboglabra group (Chinese Kale, Kai-lan)

Capitata group (Cabbage)

Gemmifera group (Brussels sprouts)

Italica group (Sprouting broccoli)

Botrytis group (broccoli, cauliflower)

Brassica pekinensis Skeels, U.S.D.A. Bur. Pl. Industr. Bull. No. 227 (1911) 51.

Brassica rapa L.

Chinensis group (*Brassica chinensis* L.) (Pak-choi or Pechay)

2. *Capsella* Medikus

Capsella bursa-pastoris Medicus, Pflanzengatt. 1 (1792) 85; --Merr., EPFP 2 (1923) 208; --Backer & Bakh.f., Fl. Java 1 (1963) 192; --Jonsell, Fl. Males. ser. 1, 10 (1988) 550.

Cosmopolitan weed, probable native in Europe, introduced in Malesia and recorded from the highlands of E Java, Philippines (Luzon), and E New Guinea. Probably more widespread.

LUZON: Benguet (Baguio, altitude c. 1400m), Mountain Province (Bontoc, altitude c. 900m). A common weed in Bontoc.

3. *Cardamine* Linnaeus

Cardamine flexuosa With., Arr. Brit. Pl. ed. 3, 3 (1796) 578; --Jonsell, Fl. Males. ser. 1, 10 (1988) 554.

Cardamine regeliana Miq., Ann. Mus. Bot. Lugd.-Bat. 2 (1865) 73; --Merr., EPFP 2 (1923) 208.

Circumpolar in N temperate region. Also in some montane areas further south. In Malesia: N Sumatra (Aceh), Java, Philippines, Sulawesi (Menado), Moluccas (Buru; Seram).

LUZON: Mountain Province, Benguet, MINDANAO. Occasional in open damp places, altitude 1200-1800m.

Cardamine hirsuta L., Sp. Pl. (1753) 655; --Backer & Bakh.f., Fl. Java 1 (1963) 191; --Jonsell, Fl. Males. ser. 1, 10 (1988) 554.

Native at least in Europe, and probably in some tropical mountains (Ethiopia, E Africa, Cameroon).

Widespread weed and naturalized in many areas including the Philippines.
Lowlands up to an altitude of c. 2200m in the Cordillera Highlands of N Luzon..

4. *Lepidium* Linnaeus

Lepidium virginicum L., Sp. Pl. (1753) 645; --Merr., EPFP 2 (1923) 207; --Backer & Bakh.f., Fl. Java 1 (1963) 187; --Jonsell, Fl. Males. ser. 1, 10 (1988) 548.

Native of North America. Widespread as a weed in all warm countries. In Malesia known from E Java and N Philippines.

LUZON: Cagayan, Nueva Vizcaya. A weed in towns, in some regions occurring along sandy seashores.

Nasturtium R Brown =Rorippa

5. *Raphanus* Linnaeus

Raphanus sativus L., Sp. Pl. (1753) 669; --Merr., Fl. Manila (1912) 214; EPFP 3 (1923) 208; --Jonsell, Fl. Males. ser. 1, 10 (1988) 546.

Only known in cultivation, said to be probably originated from hybrids between forms of *R. rapahanistrum* L. In Malesia reportedly escaping and becoming weedy at least in Java, probably elsewhere. Widely cultivated in the Philippines, from the lowlands to 2400m. Raddish; labanos.

6. *Rorippa* Scopoli

Rorippa hybosperma (OE Schulz) Jonsell, Fl. Males. ser. 1, 10 (1988) 559; --Nasturtium hybospermum OE Schulz, Bot. Jahrb. 55 (1918) 268, Fig. 1B.

S Philippines, New Guinea.

MINDANAO: North Cotabato (Dulawan). Lowland streams and rivers in marshes.

Rorippa heterophylla (Blume) Williams, Fl. Trin. & Tobago (1929) 24; --Jonsell, Fl. Males. ser. 1, 10 (1988) 559; --Nasturtium heterophyllum Blume, Bijdr. (1825) 50.

Nasturtium indicum Merr., Govt. Lab. Publ. (Philipp.) 27 (1905) 17; Fl. Manila (1912) 213; EPFP 2 (1923) 208, *non* (L.) DC.

Native to E Asia, at least from Myanmar to Japan; introduced in other tropical areas (incl. Africa and America); in Malesia: Sumatra, Peninsular Malaysia, Java, Lesser Sunda Isls (Timor), Philippines, Sulawesi, Moluccas (Ambon; Buru; Seram), Papua New Guinea. LUZON, MINDANAO. Near sea-level to 2000m, in open moist ground in cultivated lands and water courses, altitude 250-1500m.

Rorippa nasturtium-aquaticum (L.) Hayek, Sched. Fl. Str. Exs. 3-4 (1905) 22; --Jonsell, Fl. Males. ser. 1, 10 (1988) 555, Fig. 4

Nasturtium officinale R Br. in Aiton, Hort. Kew. ed. 2, 4 (1812) 110; --Merr., EPFP 2 (1923) 208; --Quisumb., Med. Pl. Philip. (1951) 335; --Backer & Bakh.f., Fl. Java 1 (1963) 191.

Native in Europe and W Asia, perhaps also in Ethiopia. Widely cultivated and spread with European settlements to temperate and montane areas throughout the world. In the Philippines commonly cultivated in the Cordillera Highlands of N LUZON, where it also escapes from cultivation, following water courses, and establishing themselves as

weeds.