Rhynchoglossum taxonomically included in Epithemoid Gesneriaceae group or tribe Epithemateae along with others genera like Whytockia W.W. Sm., Gyrogyne W.T. Wang, Epithema Blume, Monophyllaea R. Br., Loxonia Jack, and Stauranthera Benth. (Weber 2004b). Generally these groups have a similarity in unequal cotyledons, unequal leaf arrangement in one node, asymmetrically leaf blade and capsule fruits. Rhynchoglossum is allied with Loxonia and Stauranthera the shape of leaf arrangement. Rhynchoglossum has similarity with Monophyllaea in the shape of inflorescences with unilateral cymose shape (Weber 2004b).

In the earlier status, Rhynchoglossum distributed from India, Ceylon, China, Taiwan, Indochina to New Guinea in the tropical Asia (Weber 2004b). Burtt (1962) included Klugia Schltdl. as synonymy of Rhynchoglossum, which is Klugia has a distribution in Southern America from Mexico to Peru. The united of Klugia as a synonym makes distribution of Rhynchoglossum wider and disjunct to America (Figure 1). These disjunction distributions on the genus within Australasia to America make Rhynchoglossum very unique and have an interesting distribution history. Burtt (1998) give preliminary hypothesis that Rhynchoglossum reach America from Asia via Africa from where it now has completely disappeared or no species are found.

Weber (2004a; 2004b) assumed that the genus spreads from Asia to America recently, probably via transpacific trips or migrations of early Polynesians. This is also suggested by the current localities which are usually near former populations centers of ancient dwellers along the pacific coast. Mayer et al. (2003) indicate that American species (R. azureum (Schltdl.) B.L. Burtt) is a recent introduction to the neotropics and that it does not represent an ancient relic. It seem R. azureum more allied to R. notonianum (Wall.) B.L.Burtt that known from India than other species from Malesian region. The phylogenetic showed that R. azureum allied in one clade with R. notonianum and reflects clearly morphological not geographical pattern in the genus (Mayer et.al. 2003).
Rhynchoglossum obliquum Blume is the common and widespread species, found from India, China to Malesia (Bakhuizen van den Brink Jr. 1965; Burtt 1962). In the Southern America only have one species R. azureum (Schltdl.) B.L. Burtt which has disjunctions distribution with its allies in Asia especially in Southern India (Mayer et.al. 2003). Some of the other species (e.g. R. borneense Merr., R. medusothrix B.L.Burtt, and R. spumosum Elmer) only have restricted distributions and even with endemic pattern. Its preferably habitat is on the wet and shady (especially limestone) rocks, in the forest or open vegetation or shady places; usually grow in the lowlands (Weber 2004b).

Rhynchoglossum in general have specific characters like perennial or annual, monocarpic herbs, stems with sparse hairs indumentum from often branched, many-celled, to glandular hairs. Stems terete, fleshy-succulent, usually branched. Leaves alternate, nearly distichous, short petiolate; lamina obliquely olate-cordate; base asymmetrical, one half cordate, the other sinuate-attenuate; texture thin and delicate. Inflorescences terminal on main and side branches, unilateral racemes with two rows of flowers, subtending bracts small, linear, placed onto the pedicels in most species; a few sterile bracts often present on the flowerless side of the inflorescence axis. Sepals connate in the lower half, with without wings at the lines of fusion, lobes narrow triangular-acute. Corolla
strongly zygomorphic; tube cylindrical, white; limb strongly bilabiate, upper lip of two short, upright or reclined lobes, lower lip a large, roundish or elongate, not or only slightly three-partite tongue of azure colour. Fertile stamens four (the former genus *Klugia*) or two (*Rhynchoglossum* s.str.). Ovary globose-ovoid. Fruit a globose or ovoid capsule included in the calyx, dehiscing loculicidally by 2 valves (Weber 2004b). The illustration of the genus show on Figure 2.

Figure 2  Illustration of *Loxotis obliqua = Rhynchoglossum obliquum*
(from Brown 1838)
Brown (1832) proposed a new genus of *Antonia* with the species of *A. obliqua* (Wall.) R. Br. which is combination of *Wulfenia obliqua* Wall. (Weber 2004a). Three years later Brown moved the species into the genus *Loxotis* R. Br. ex Benth. and made a new combination of *L. obliqua* (Wall.) R. Br.. The species is surviving for a long time as well as Miquel (1855) use it. Later on Clarke (1883) realizes that *Antonia* and *Loxotis* are superfluous because it is similar and identical to *Rhynchoglossum* and then he put both genera under synonym of *Rhynchoglossum*. Recently Burtt (1962) also included *Klugia* to a synonym cause it is only a variation of *Rhynchoglossum*.

The latest study by Burtt (1962) sign 13 species of *Rhynchoglossum* all over the world comprising 10 species from Asiatic and 3 from America. After that number species of *Rhynchoglossum* are decrease because reducing some species into synonym. *Rhynchoglossum grandiflorum* (Fritsch) B.L. Burtt and *R. violaceum* (Fritsch) B.L. Burtt are turn into synonym of *R. azureum* because of the similarity in morphology and geography (Wiehler 1983). Wang et.al. (1998) reduce *R. hologlosum* Hayata into synonym of *R. obliquum*. Since the reduction of some species into synonym, total number species of *Rhynchoglossum* known only 10 species all over the world (Mayer et.al. 2003; Weber 2004b).

History of the number species proposed in Malesia start when Blume (1826) established the *R. obliquum* as the type of the genus from Java. After Blume published the type then followed by de Candolle (1845) which established another species *R. blumei* DC. from Java. Clarke (1883) included *R. blumei* to be a synonym of *R. obliquum* and established a new species of *R. klugioides* C.B. Clarke from Luzon, Philippines. The species epithet is given by Clarke as a species which have similarity with *Klugia*. In the early of twentieth century, Elmer (1908) proposed a new *R. spumosum* Elmer from Negros Philippines and followed by Kraenzlin (1913) proposed *R. merrilliae* Kraenzl. from Mindanao, Philippines. Ten years later, a new species of *Rhynchoglossum* proposed by Schlechter (1923) which is from New Guinea and named as *R. papuae* Schltr. another species from Borneo proposed by Merrill (1929) and named as *borneense* Merr. The last species that ever found is *R. medusothrix* which is
proposed by Burtt (1962) also from Borneo and completely sign seven species number in Malesia (Appendix 1).

Phylogenetic analysis of *Rhynchoglossum* using molecular DNA was studied together with another member of tribe *Epithemateae*. Phylogenetic tree showed that *Rhynchoglossum* separate in different clade with another *Epithemateae* and act as sister position. This separation is in accordance with many and strong morphological differences (e.g., alternate leaf arrangement, strongly asymmetrical leaves, terminal inflorescences in the form of unilateral racemes, enlarged lower lip of corolla). The genus has many special characters in common with the other *Epithemateae*, except *Monophyllaea* and *Whytockia*. In the *Rhynchoglossum* group reflected in the phylogram by two clades; *R. notonianum* (India) and the neotropical *R. azureum* vs. *R. obliquum* (Malesia). The separation clearly indicated the affinity with morphological characters and not the geographical pattern, which can be seen as an indication that *R. azureum* is a recent introduction to the neotropics and that it does not represent an ancient relict. The groups can be roughly classified in two: (1) perennials with large flowers and four stamens (the former genus *Klugia*) and (2) annuals with small flowers and two stamens (Mayer et al. 2003).