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PRUNASIN AND AMYGDALIN FROM *SORBUS COMMIXTA*

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Key Word Index—*Sorbus commixta*; Rosaceae; prunasin; amygdalin; UV light hydrolysis; gentiobiose.

Plant. Sorbus commixta Hedl. (*S. aucuparia* var. *japonica* Max.) Rosaceae. *Previous work.* Prunasin was detected from *Sorbus aucuparia* by PC [1]. *Present work* Fresh plants of *Sorbus commixta* (2.7kg) were extracted with MeOH, the MeOH extract evaporated to dryness, and the residue extracted with water. The aqueous solution was extracted with Et_2O. From the Et_2O extract prunasin (**1**) was obtained (0.5% for seeds, 0.01% for leaves, 0.05% for barks, 0.003% for roots). **1** was recrystallized from EtOAc to give crystals, mp 147–148°, $[\alpha]_D^{20}$ − 27.2°. **1** was identified by mp, GLC, UV, IR and NMR. The aqueous solution (70g) was chromatographed over charcoal using 10–20% EtOH. The residue obtained from 20% EtOH fraction on rechromatography over Si gel using EtOAc–MeOH (4:1) gave amygdalin (**2**) (0.007g). **2** was identified by mp GLC, UV, IR and NMR. This is the first isolation of **2** in crystalline form from *Sorbus* species. **2** was hydrolyzed by a new method developed by us [2,3]. Then, **2** (200 mg) in 0.2N H_2SO_4 (20 ml) was hydrolyzed by irradiating it with UV light (from a low voltage UV lamp, 120 W) for 3 hr at room temp. (20°) to give gentiobiose (10%) which was identified by TLC and GLC. Conventional acid hydrolysis of **2** gave 2 mol of glucose.

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L-γ-GLUTAMYL-2-AMINO-3-HEXANONE DANS *RUSSULA OCHROLEUCA**

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Key Word Index—*Russula ochroleuca*; Basidiomycete; new aminoketone; L-γ-glutamyl-2-amino-3-hexanone.

Abstract—A new peptide, L-γ-glutamyl-2-amino-3-hexanone has been isolated from a mushroom *Russula ochroleuca*. The suggested structure is supported by ^1H and ^{13}C NMR spectroscopy. It is the first natural α-aminoketone associated with glutamic acid.

Ce travail s'inscrit dans une série d'études sur la répartition des acides aminés et peptides libres des champignons*. Un nombre important de γ-glutamylamines ont été isolées du règne végétal [1]. Dans les Basidiomycètes, leur répartition est cependant plus limitée. Citons une nouvelle substance, la γ-glutaminyl-4-hydroxybenzène trouvée récemment par Weaver *et al.* [2] dans *Agaricus bisporus* et qui n'est autre que la γ-glutamyl-4-hydroxyaniline isolée par Casimir *et al.* [3] en 1960 à partir de *A. hortensis*. *A. bisporus* contient aussi la γ-glutamyl-4-hydroxyméthylphénylhydrazine [4] tandis que la γ-glutamyl-4-formylphénylhydrazine et la γ-glutamyltyramine ont été identifiées dans *A. subrufescens* [5]. Un dérivé d'amine très simple a été trouvé dans *Xerocomus badius*, il s'agit de la γ-glutamyléthylamine [6].

* Casimir, J; Jadot, J; Dardenne, G. Publ. 10 Acides aminés et peptides des champignons. Publ. 9 voir Dardenne *et al.* (1974) *Phytochemistry* **13**, 1897.