

**Type:** U.S.S.R.: Kazakhstan, Alma-Ata, ex grapes, 1968, *L.A. Beljakova* (IMI 174724, neotype), as *Aspergillus vitis* Novobranova.

**Hosts:** Stored cereals, e.g. wheat (Pelhâte, 1968; Wallace *et al.*, 1976), corn (Barron & Lichtwardt, 1959), barley (Abdel Kader *et al.*, 1979), rice (Kurata *et al.*, 1968a,b; Saito *et al.*, 1971), nuts, e.g. peanuts (Joffe, 1969; Oyeniran, 1980), hazelnuts (Senser, 1979), cheese (Northolt *et al.*, 1980), dried salt fish (Phillips & Wallbridge, 1977), flour and refrigerated dough (Graves & Hesseltine, 1966), bread (Dragoni *et al.*, 1980), jam (Udagawa *et al.*, 1977), hay, soil, horse skin, old shoe, cloth, bamboo stem, PTFE covered wire, dates, savoury preserves and culture container (CMI, 1988).

**Distribution:** United Kingdom, U.S.A., French Guiana, India, Sudan (CMI, 1988).

**Specimens:** **United Kingdom:** Reading, ex barley, 1965, *J. Clarke* (IMI 140508); CBS 521.65 (as *Eurotium repens* var. *amstelodami* Vuill.). -**The Netherlands:** 1909 (IMI 211806).

**Notes:** *E. amstelodami* is one of the common stored product fungi growing at moisture contents of 14% (Christensen & Kaufmann, 1974), and as such has been isolated on numerous occasions. There is some evidence that *E. amstelodami* is toxic to rabbits (Rabie *et al.*, 1964).

I have examined the type culture of *E. vitis* Novobranova (IMI 174724) and consider it to be conspecific with *E. amstelodami* on the basis of similarities of the conidia and ascospores (Fig.42). This is in agreement with the views of Samson (1979). Since *A. vitis* Novobranova predates *A. hollandicus* Samson & Gams it becomes the accepted name for the anamorph.

***Eurotium amstelodami* var. *montevidense*** (Talice & MacKinnon) Kozakiewicz, **comb. nov.**

*Aspergillus montevidensis* Talice & MacKinnon, *C.r. Séanc. soc. Biol.* **108**: 1007 (1931), as '*Aspergillus (Eurotium) montevidensis*'.

*Eurotium montevidense* (Talice & MacKinnon) Malloch & Cain, *Can. J. Bot.* **50**: 64 (1972).

Anamorph: ***Aspergillus vitis* var. *montevidensis* Kozakiewicz, var. nov.**

Anamorphosis *Eurotium amstelodami* var. *montevidense*. Stipites conidiophorum hyalini vel luteovirides, 300–350 µm alti, vesiculae subglobosae, 15–20 µm diam., phialides 6.0–7.0 µm × 3.0–3.5 µm. Conidia (sub) globosa, spinulosa, plerumque 4.0–5.0 µm × 3.0–4.0 µm, catenis radiantibus vel columnaribus disposita, olivaceo-viridia. Holotypus IMI 172290.

**Description:** Identical with *E. amstelodami* var. *amstelodami* in form of conidium and ascospore, cf. Fig.42c,d with 42a,b.

**Type:** **Uruguay:** Montevideo, ex tympanic membrane of man, 1931, *R.V. Talice & J.E. MacKinnon* (IMI 172290, holotype).

**Host:** From man.

**Distribution:** Uruguay.

**Notes:** Colonies of *E. amstelodami* var. *montevidense* are persistently more conidial in growth than those of *E. amstelodami* var. *amstelodami* which bear large numbers of ascomata. For this reason I have reduced *E. montevidense* to varietal status. Although *E. amstelodami* var. *montevidense* has been infrequently isolated, it has possibly been misidentified as *E. amstelodami* var. *amstelodami*.

## Micro-tuberculate category

Three species are included in this category, each with a unique morph to both anamorphic and teleomorphic states (Fig.43). The echines are minute, probably no more than 250 Å in width. Despite this, subtle differences in the size and shape of these make it possible to distinguish the three taxa in this group (Fig.43, left series).

Surprisingly, the ascospore form of these three taxa (Fig.43, right) is very distinct, more so than has been encountered in any of the previous categories in the *A. glaucus* group. It would indicate that the minute but distinct differences shown by the conidia do reflect specific differences. This is encouraging for a group, the traditional identification of which causes considerable expenditure of time and effort and includes a fair probability of error.

***Eurotium glabrum*** Blaser, *Sydowia* **28**: 35 (1976) ['1974/1975'].

Anamorph: ***Aspergillus glaber*** Blaser, *Sydowia* **28**: 35 (1976) ['1974/1975'].

**Illustrations:** Fig.43a,b.