



A. Conidiogenous cells and conidia. B. Asci and ascospores.

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Cytophoma pruinosa (Fr.) Höhn., *Sitzber. Acad. Wiss. Wien, Math.-Naturwiss. Kl., Abt. 1* **123**: 85 (no. 863), 1914.

Sphaeria ligustri Schwein., *Transactions of the American Philosophical Society of Philadelphia* New series **4** (2): 219, 1832.

Valsa ligustri (Schwein.) J. Schröt., apud Cohn, *Krypt.-Fl. Schlesiens* Band **3** **2** (4): 412, 1897.

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Valsa fraxinina Peck, *Bulletin of the Torrey Botanical Club* **11**: 28, 1884.

Cytospora chionanthi Ellis & Everh., *Proceedings of the Academy of Natural Sciences of Philadelphia* **46**: 340, 1894.

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Engizostoma chionanthi (Ellis & Everh.) Kuntze, *Revisio Generum Plantarum* **3** (2): 473, 1898.

Cytospora annularis Ellis & Everh., *Bulletin of the Torrey Botanical Club* **24**: 288, 1897.

Anamorph. Preceding teleomorph, usually in a separate stroma. *Anamorphic stromata*. Mixed with teleomorphic stromata, conical, rounded conical, up to 1 mm diam., each containing only one locule; disc variable, if present, prominent, grey, circular, with a single central black ostiole, often rather small or absent; ostiole 200-300 µm high, from which conidia are extruded in dark brown, almost black tendrils; ectostroma forming a flared ring around the ostiole below the bark; endostroma well- to poorly-developed. *Conidiomata*. Globose, single, *Cytophoma*-type, olive-coloured inside; walls up to 100 µm wide, composed of dark brown cells up to 10-12 µm diam forming mostly *textura angularis* gradually becoming *textura prismatica* and then even *textura porrecta* towards the edge where conidiophores arise from. *Conidiophores*. Simple or slightly branched, 15-70 x 1.5-3 µm. *Conidiogenous cells*. Colourless, thin-walled, smooth, cylindrical or slightly tapered, 7-10 x 1-2 µm, with slightly thickened walls at the fertile apex (conidiogenous cells, up to about 25 µm long are also occasionally seen in this and other *Valsa* taxa). *Conidia*. 4-7 x 1 µm. *Conidial development*. Initiation holoblastic, by apical wall building, with simultaneous maturation; delimitation by a double septum, with delimitation of subsequent conidia at the same point on the conidiogenous cell as for the first, so that the conidiogenous cell does not elongate; secession by fission of the double septum; proliferation enteroblastic, percurrent, subsequent proliferations giving rise to the wall-thickening observed at the apex of the conidiogenous cell.

Teleomorph. Following anamorph, usually in a separate stroma. *Teleomorphic stromata*. Pulvinate to flat, lifting the periderm, often covering the whole surface of the bark, mixed with anamorphic stromata, each containing 3-12 (-25) ascomata arranged irregularly, in a ring or in a loose cluster; ectostroma is essentially reduced; disc, when present, grey, circular, up to 750 µm diam, with ostioles forming a central cluster occasionally extending up to 0.5 mm beyond the disc, but often composed only of united large black ostioles; ectostroma lacking or small; endostroma variable. *Ascomata*. Perithecial, 300-600 µm diam, with rather short beaks, centrally to laterally inserted. *Asci*. Clavate-subcylindric, with only one functional wall layer visible with the light microscope, 8-spored, 40-74 x 7-16 µm, with an apical ring usually appearing as two refractive quadrangles, not turning blue in iodine, often becoming detached from the hymenium, floating freely and with a rounded base. *Ascospores*. Colourless, thin-walled, smooth, aseptate, allantoid, 12-25 x 3-5 µm.

DISEASE: Little is known about the relation between this fungus and the plants it inhabits. Like the two subspecies of *V. ambiens*, also recorded from the Oleaceae this fungus may occasionally be found on dying twigs and therefore may have some role as a weak parasite.

HOSTS: Oleaceae: *Fraxinus*, *Ligustrum*, *Olea*, *Syringa*.

GEOGRAPHICAL DISTRIBUTION: Asia: Armenia, Georgia, Kazakhstan, Russia. Europe: Czech Republic, France, Germany, Italy, Rumania, Russia, Slovakia, Switzerland, UK, Ukraine. North America: Canada, USA.

PHYSIOLOGIC SPECIALIZATION: None reported.

TRANSMISSION: Both conidia and ascospores are air-borne, especially under humid conditions.

NOTES: This species has several distinctive characters which prevent it being confused with others: the anamorph has a single locule and a flared ectostromatic ring around the ostiole; the teleomorph has united ostioles coalescing to become a solid structure, often appearing as a black disc, a rather reliable character. Urban (1957) divided the genus *Valsa* into three sections. *Valsa cypri* is a representative of sectio *Cypri*. Information

about hosts, substratum and geographical distribution is derived partly from 27 records in the junior author's computerized database. The *Open Society Foundation* is thanked for supporting the senior author. The UK Darwin Initiative is thanked for providing the computer on which this work was prepared.

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V.P. Hayova & D.W. Minter

[Numbers in brackets, e.g. (62, 5055), refer to abstracts in the Review of Plant Pathology]

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