The *Rhytismataceae (Ascomycetes, Rhytismatales*) in Belgium.

1. The genus *Coccomyces*

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Key to the collected Western-European species of Coccomyces.

Remark – All measurements are related to observations on material in fresh conditions.

1 Apothecia up to 3 mm diam., brown fleshy covering layer opening exposing an ivory hymenium and forming a more or less dentate margin, sitting above the substrate. Asci 160-240x12-16 µm. Spores 35-50x3,5-4,5 µm, filled with 8-10 large guttules, OCI=4. Paraphyses with curved to curled tip. On bleeched fallen leaves of *Betula*, *Fagus* and *Quercus*, according literature on stems of *Rubus* too. Late summer and autumn.

Coccomyces tumidus (Fr.) de Not.

1' Apothecia with hard carbon-like covering layer 2

2 Apothecia 1-2 mm diam., covering layer splitting open in 4-6 irregular teeth to expose a sulphur yellow hymenium. Asci 100-160x11-13 µm. Spores with thin hyaline covering, 60-95x2,5-3 µm, filled with small guttules, OCI=4,5-5. Paraphyses with straight to slightly 4-5(6) µm diam. swollen tip, with cylindrical refractive vacuoles. On bleached spots on fallen leaves of *Betula, Quercus robur* en *Quercus rubra*. Autumn.

Coccomyces coronatus (Schum.) de Not.

2' Hard coal-like covering layer splitting up according a pattern 3

3 Apothecia 2-4 mm diam., coal-like covering layer splitting up in penta- and hexagons. Asci 160-190x13-14 µm. Spores 90-95x3-3,5 µm, OCI=4-4,5. Paraphysen with hardly thickened tip. On fallen leaves of *Salix sp*. Spring.

"Rhytisma" salicinum (Pers.) Fr.

3' Covering layer splitting up according a starlike pattern 4

4 Apothecia up to 1 mm diameter, black covering layer splitting up into 4(-5) regular teeth. Asci 70-105x8-10µm. Spores 0(1,3)-sept., 45-65x2,5 µm, both ends filled with small guttules, OCI=3. Paraphyses with straight clavate tip. On bleached spots on fallen leaves of *Castanea sativa*, *Quercus robur* and *Quercus rubra*. Summer and autumn.

Coccomyces dentatus (Kunze & Schm.) Sacc.

4' Spores longer 5

5 Apothecia up to 2 mm diameter, black covering layer splitting up into 4 to 6 regular teeth. Asci 4-(8?)-spored, 115-140x12-15 µm. Spores with thin hyaline coating, 65-90x4,5-5 µm, filled with up to 1,5 µm diameter refractive guttules, OCI=5. Paraphyses with a swollen curved tip, with olivaceous content, forming an epithecium covered with crystals. On bleached spots on dead twigs of *Vaccinium myrtillus*. Summer and autumn.

Coccomyces leptideus (Fr.) B. Eriksson

5' Apothecia up to 1 mm diameter, triangular (sometimes square), covering layer splitting up into 3(4) regular teeth. Asci 8-spored, 175-190x9-10 µm. Spores with thin hyaline coating, 75-95x2-2,5 µm, filled with small guttules, OCI=5. Paraphyses cylindrical, basal part moniliform. On bleached spots of fallen leaves of *Laurus nobilis*. South-European species. Spring to early summer.

Coccomyces delta (Kunze) Sacc.

Conclusions

1. *C. tumidus*, type of the genus, is atypical for the species used to be included due to its fleshy non carbonaceous stromatic covering layer which splits by forming irregular teeth. De Notaris (1847) maybe was right when, by erecting *Coccomyces*, he excluded *C. coronatus*, *C. dentatus* and *C. delta* explicitly.
2. *C. delta*, *C. dentatus* and *C. leptideus* form a congeneric group with carbonaceous stroma which splits according a very regular pattern. *Rhytisma salicinum* seems to belong here. Further investigation should establish if this natural group needs a separate generic name.
3. *C. coronatus* is to be rediscovered in our country and redescribed based on fresh material. (Actualisation : The species has been rediscovered by the author as per 09.2000)