Yellow seed colour is an important objective in breeding of winter oilseed rape (Brassica napus). The yellow seed colour trait is associated with a reduction of crude fibre content and a concomitant increase of digestible energy and protein content in the meal. Therefore, improving the nutritional value of rapeseed through the development of yellow-seeded B. napus varieties would have a strong impact on the relations of the feed meal market and especially on the production of oilseed rape in Europe and would be beneficial for the competitiveness with soybean meal. This project aims to do a genetic and physical mapping to identify and characterise the B. napus loci for seed colour, GSL, protein and oil content.