

## Rice

---

Rice has the smallest genome and was the first to be sequenced among cereals. Both the *indica* and *japonica* genome have been sequenced and published by separate group in 2002 (Yu J et al. 2002 and Goff SA et al. 2002). The *indica* genome is 420 Mb in size and contains 32,000 to 50,000 genes, while *japonica* is larger, at 466 Mb, and contains around 46,022 to 55,615 genes.

International Rice Genome Sequencing Project (IRGSP) was established to map the *japonica* rice genome. The IRGSP adopted the "clone-by-clone shotgun sequencing strategy" so that each specific position on the genetic map was associated with a sequenced clone. In December 2004, the completed rice genome sequence was made available through the [NCBI database](#).

### Genome paper:

- Goff SA, et al. (2002) [A draft sequence of the rice genome \(\*Oryza sativa\* L. ssp. \*japonica\*\)](#). *Science*. 296(5565):92-100.
- Yu J, et al. (2002) [A draft sequence of the rice genome \(\*Oryza sativa\* L. ssp. \*indica\*\)](#). *Science*. 296(5565):79-92.