

ASHA VAHISHTA THE ULTIMATE TRUTH KNOWLEDGE

Truly the knowledge derived
By the good mind
Never before known
Among the wise and in the universe
With it make good rules and never waning
Increasing righteousness
Leading us towards Perfection

ZARATHUSHTRA -Yasna Ha 28.3 (FR)

Turning Leaves into Flowers

It took plants about 500 million years to evolve the ability to turn leaves into petals. Martin Yanofsky, a development biologist at the University of California at San Diego, duplicated the feat in just over a decade - a milestone in plant genetics.

The first step towards success came in 1990, when molecular biologists identified three plant genes called ABC. Without them plants produce leaves in place of petals, but further tests showed ABC alone can't cause flowering. Last year Yanofsky and his colleagues identified SEP, a complementary set of genes that seemed to regulate the transformation of leaf into petal. They recently proved that ABC plus SEP contains the full genetic recipe for blooming by creating a reengineered Arabidopsis plant. "All of the leaves look exactly like normal petals," Yanofsky says.

This work may have more than theoretical implications. "If you switched the genes on in any flowering plant, you'd have petals all along the stem the same colour as the bud on the top," say Yanofsky. Such super flowers might be useful for producing pigments and perfumes, or simply for upping the ante on Valentine's Day.

(Kathy A. Svitil Discover May 2001)

Beating Death

King David's advisers urged him to clasp a young virgin to his bosom. Pythagoras advocated a diet of acorns, fruit, and grain, while Sir Francis Bacon favoured anointing the skin with ointments and pomades. Nowadays scientists turn to fruit flies.

Michael Rose, an evolutionary biologist at the University of California at Irvin, has recently reported some eyebrow raising success. In his lab he has doubled the life span of fruit flies and believes the lesson he has learned will enable humans to do the same. He says, "Aging just isn't some God given inevitable thing. It is something you can change and control. But we know that aging is very complex, and you want to approach any intervention with great care, I am not an advocate of a quick fix."

He does not believe the longer life span would mean more time being frail. He says, " My fruit flies that have postponed aging also have enhanced performance. They are dynamic and vigorous while normal flies are barely moving around.

About, how people react to the possibility of extending life. He says, "There are all sorts of people who are opposed to us doing anything. The federal government has this need for us to die on our due date, so we don't bankrupt Social Security or Medicare. I have heard people give moving addresses as to why we should die as soon as possible **'so that we can know God's love sooner.'** I am all for those people dying. I just know other people who don't want to die, least of all by the horrible process of aging, and I don't see any reason why they shouldn't be allowed to go on living."

About the limit of human life span he says, " **I believe the limit of human life span is the limit of human technology.**"

(Adapted from Discover May 2001 - Michael Rose)